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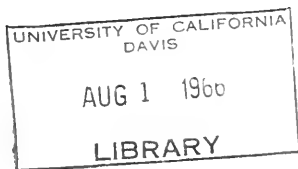
State of California
THE RESOURCES AGENCY
Department of Water Resources

BULLETIN No. 130-64

HYDROLOGIC DATA: 1964

Volume III: CENTRAL COASTAL AREA

JUNE 1966



HUGO FISHER
Administrator
The Resources Agency

EDMUND G. BROWN
Governor
State of California

WILLIAM E. WARNE
Director
Department of Water Resources

State of California
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FOREWORD

Bulletin No. 130 is designed to present comprehensive and accurate hydrologic data to the public. The bulletin is published annually in five volumes, each volume reporting data for a specific area of the State. Volume III, "Central Coastal Area", presents data from the area depicted on page iii.

The collection and publication of these data are authorized by Sections 225, 229, 230, 345, 12609, and 12616 of the Water Code of the State of California.

Collection of much of the data presented has been possible only because of the generous help of other agencies. Their assistance has enabled us to make Bulletin No. 130 more complete and accurate.

Acknowledgments of agencies who have directly contributed to Bulletin No. 130-164, Volume III, are made in each appendix.

A handwritten signature in dark ink, appearing to read "W. E. Warne", is written over the printed name.

William E. Warne, Director
Department of Water Resources
The Resources Agency
State of California

ORGANIZATION OF BULLETIN NO. 130 SERIES

- Volume I - NORTH COASTAL AREA
- Volume II - NORTHEASTERN CALIFORNIA
- Volume III - CENTRAL COASTAL AREA
- Volume IV - SAN JOAQUIN VALLEY
- Volume V - SOUTHERN CALIFORNIA

Each volume consists of the following:

TEXT and

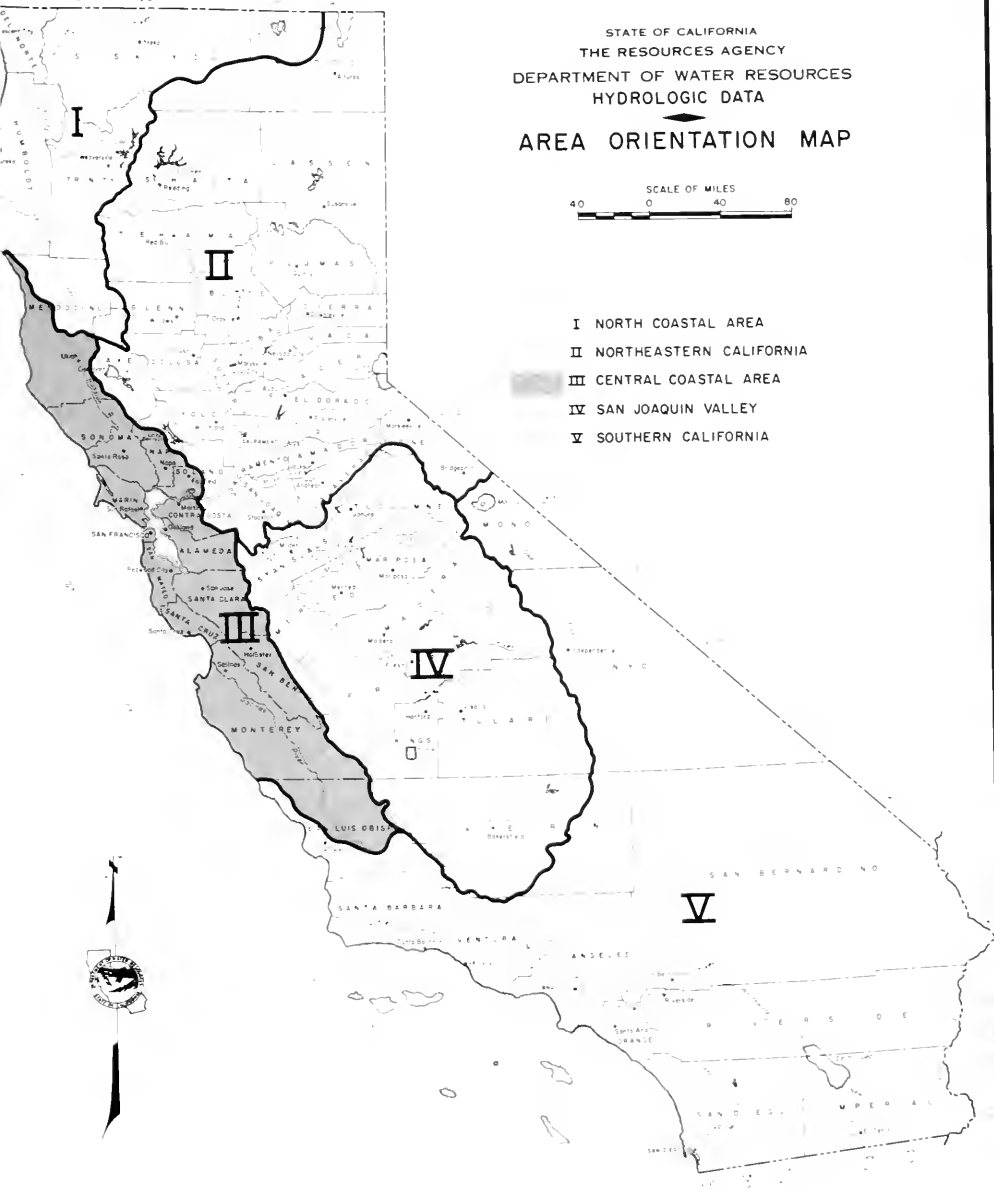
- Appendix A - CLIMATE
- Appendix B - SURFACE WATER FLOW
- Appendix C - GROUND WATER MEASUREMENTS
- Appendix D - SURFACE WATER QUALITY
- Appendix E - GROUND WATER QUALITY

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
HYDROLOGIC DATA

AREA ORIENTATION MAP



- I NORTH COASTAL AREA
- II NORTHEASTERN CALIFORNIA
- III CENTRAL COASTAL AREA
- IV SAN JOAQUIN VALLEY
- V SOUTHERN CALIFORNIA



METRIC CONVERSION TABLE

ENGLISH UNIT	EQUIVALENT METRIC UNIT
Inch (in)	2.54 Centimeters
Foot (ft)	0.3048 Meter
Mile (mi)	1.609 Kilometers
Acre	0.405 Hectare
Square mile (sq. mi.)	2.590 Square kilometer
U. S. gallon (gal)	3.785 Liters
Acre foot (acre-ft)	1,233.5 Cubic meters
U. S. gallon per minute (gpm)	0.0631 Liters per second
Cubic feet per second (cfs)	1.7 Cubic meters per minute

TABLE OF CONTENTS

	<u>Page</u>
ORGANIZATION OF BULLETIN NO. 130 SERIES	iv
AREA ORIENTATION MAP	v
METRIC CONVERSION TABLE	vi
ORGANIZATION	xi
DATA COLLECTION ACTIVITIES	1
Climate	1
Surface Water Flow	2
Ground Water Measurements	2
Surface Water Quality	5
Ground Water Quality	5

APPENDIXES

Appendix Number

A.	CLIMATE	7
	Acknowledgments	9
	Introduction	10
	Drainage Basin Designation	11
	Alpha Order Number and Subnumber	11
	Climatological Station Index	12
	Interim Monthly Precipitation	13
	Seasonal Precipitation	13
	Interim Monthly Temperature	13
	Monthly Temperature	13
	Interim Monthly Evaporation	13
	Monthly Evaporation	13
B.	SURFACE WATER FLOW	39
	Acknowledgments	41
	Introduction	42
	Maximum and Minimum Tides	42
	Daily Mean Discharge	43
	Daily Mean Gage Height	44
	Imports	44
	Numbering System of Recording Stations	45

TABLE OF CONTENTS

APPENDIXES (Continued)

<u>Appendix Number</u>		<u>Page</u>
C.	GROUND WATER MEASUREMENTS	53
	Acknowledgments	55
	Introduction	56
	Description of Selected Wells	56
	State Well Number	56
	Agency Well Number	57
	Agency Supplying Data	57
	Well Use	60
	Well Depth	60
	Data Available	60
	Record Begins and Ends	61
	Ground Water Levels at Wells	61
	Ground Surface Elevation	61
	Date	61
	Ground Surface to Water Surface in Feet	62
	Water Surface Elevation in Feet	62
	Agency Supplying Data	62
D.	SURFACE WATER QUALITY	95
	Acknowledgments	97
	Introduction	98
	Laboratory Methods and Procedures	98
	Sampling Station Data and Index	98
	Analyses of Surface Water	99
	Summary of Coliform Analyses	99
	Spectrographic Analyses of Surface Water	99
	Radioassays of Surface Water	100
	Salinity Observations at Bay and Delta Stations	100
	Electrical Conductance	101
E.	GROUND WATER QUALITY	177
	Acknowledgments	179
	Introduction	180
	Analyses of Ground Water	180
	Radioassay of Ground Water	181

TABLE OF CONTENTS

TABLES

<u>Table Number</u>		<u>Page</u>
	DATA COLLECTION ACTIVITIES	
1	Summary of Ground Water Data Collected in the Central Coastal Area, July 1, 1963 - June 30, 1964	4
	APPENDIX A - CLIMATE	
A-1	Climatological Station Index	14
A-2	Interim Monthly Precipitation, 1963	17
A-3	Seasonal Precipitation, 1963-64	19
A-4	Interim Monthly Temperature, 1963	23
A-5	Monthly Temperatures, 1963-64	26
A-6	Interim Monthly Evaporation, 1963	35
A-7	Monthly Evaporation, 1963-64	37
	APPENDIX B - SURFACE WATER FLOW	
B-1	Daily Maximum and Minimum Tides	47
B-2	Daily Mean Discharge	49
B-3	Daily Mean Gage Height	51
B-4	Surface Water Imports to the Central Coastal Area	52
	APPENDIX C - GROUND WATER MEASUREMENTS	
C-1	Ground Water Level Conditions in the Central Coastal Area, Spring, 1964	63
C-2	Description of Selected Wells	
	North Coastal Region	64
	San Francisco Bay Region	65
	Central Coastal Region	67
C-3	Ground Water Levels at Wells	
	North Coastal Region	70
	San Francisco Bay Region	74
	Central Coastal Region	83
	APPENDIX D - SURFACE WATER QUALITY	
D-1	Sampling Station Data and Index	102
D-2	Analyses of Surface Water	
	North Coastal Region (No. 1)	104
	San Francisco Bay Region (No. 2)	112
	Central Coastal Region (No. 3)	131
	South Bay Aqueduct	163
D-3	Summary of Coliform Analyses	165
D-4	Spectrographic Analyses of Surface Water	166

TABLE OF CONTENTS

TABLES

<u>Table Number</u>		<u>Page</u>
	APPENDIX D - SURFACE WATER QUALITY (Continued)	
D-5	Radioassays of Surface Water	167
D-6	Description of Salinity Observation Stations and Maximum Observed Salinity at Bay and Delta Stations	171
D-7	Salinity Observations at Bay and Delta Stations	172
	APPENDIX E - GROUND WATER QUALITY	
E-1	Analyses of Ground Water North Coastal Region (No. 1) San Francisco Bay Region (No. 2) Central Coastal Region (No. 3)	182 185 209
E-3	Radioassays of Ground Water	219

FIGURES

	APPENDIX C	
C-1	Fluctuation of Water Levels in Wells North Coastal Region San Francisco Bay Region Central Coastal Region	87 88 91
	APPENDIX D	
D-1	Electrical Conductance - Daily Mean Alameda Creek near Niles (Station 73)	182
D-2	Electrical Conductance - Daily Readings at 1300 Hours Bethany Forebay at South Bay Pumping Plant (Station 207). .	183

PLATES

(Plates are bound at end of report)

<u>Plate No.</u>	
1	Climatological Stations in the Central Coastal Area, 1964
2	Surface Water Measurement Stations in the Central Coastal Area, 1964
3	Ground Water Basins or Units in the Central Coastal Area, 1964
4	Surface Water Quality Stations in the Central Coastal Area, 1964
5	Status of Sea-Water Intrusion, Santa Clara Valley, East Bay Area, 1964

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

EDMUND G. BROWN, Governor
HUGO D. FISHER, Administrator, The Resources Agency
WILLIAM E. WARNE, Director, Department of Water Resources
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SAN FRANCISCO BAY DISTRICT

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Reviewed and coordinated by
Statewide Planning Office
Data Coordination Branch



DATA COLLECTION ACTIVITIES

The Department of Water Resources, in cooperation with federal, state, and local agencies, as well as with the generous and public-spirited assistance of many individuals, has gradually developed a continuing program of basic hydrologic data collection. This continuity enables systematic and orderly handling, filing, and publication of the data for all uses both now and in the future.

The data collection activities involve the maintenance of a network of stations adequate to provide reliable, meaningful, representative, and needed information. The number of stations in the network is maintained at a minimum needed for general evaluation of water conditions and for a long term base for water management and planning purposes. Water samples or water measurements are taken at these stations, chemical analyses of the samples are made and the data are compiled, analyzed, summarized, and published. These data include information on climate, surface water flows and tidal stages, ground water levels, and chemical quality of surface and ground waters. The climate data include precipitation, air temperature, wind movement, and evaporation. Pacific Standard Time is used throughout the report.

CLIMATE

The reporting period for climatologic data was changed in this report from a fiscal year, July 1 through June 30, to a water year, October 1 through September 30, to make the period the same as for surface water flow and surface water quality data. Climatologic data for the period July 1, 1963, through September 30, 1963, are also included in this 1964 report.

The climatology station network shown on Plate 1, "Climatological Stations in the Central Coastal Area", includes stations established by the U. S. Weather Bureau and the Department of Water Resources. The Department supplements the Weather Bureau network of 143 stations with a network of 75 selected stations which are operated by individual, private industry and governmental agencies. Data from these 218 stations are tabulated in Appendix A of this report.

SURFACE WATER FLOW

The four surface water stations shown on Plate 2 are operated by the Department of Water Resources. In addition, the Department cooperates with the United States Geological Survey in the operation of 58 of the 114 stations operated by that agency in the area covered by this report. Also, the United States Coast and Geodetic Survey operates two tide stations in the area. The United States Geological Survey publishes data from the 114 stations in its water supply papers. There are a number of surface water stations operated by local agencies for local purposes from which data are not routinely collected by the Department. Data from the four stations and from Rector Reservoir and information on surface water imports into the area are tabulated in Appendix B.

GROUND WATER MEASUREMENTS

The Department cooperates with the U. S. Geological Survey and many local agencies for the systematic observation of ground water levels. The Department collects water level measurement data from approximately 1,700 wells in the Central Coastal Area. Data from 204 wells are presented in Appendix C of this report. These 204 wells were selected as representative of wells in the respective ground water basins or units. The wells were

selected on the basis of a number of factors such as geographical density of one or two wells per township; length of water level record; frequency of measurements; conformity with respect to water level fluctuations in the ground water basin or area, aquifer represented, and availability of a geologic log, mineral analyses, and production records.

The depth to water in most wells is usually a direct measurement made with a tape; however, in some wells, especially deep ones, measurements are made with an air line and gauge or an electric sounder. Field work was performed by local cooperators, the U. S. Geological Survey and Department personnel. The Department has full responsibility for reviewing, editing, processing and publishing ground water level data. An electric computer program has been developed to perform a part of the processing and tabulating.

Ground water basins or units in the Central Coastal area are shown on Plate 3. The number of wells measured in these areas and the measuring agency are shown in Table 1.

The data are summarized in Table C-1, "Ground Water Level Conditions in the Central Coastal Area", which presents average depths to ground waters, and average changes by basin and region from the spring of 1963 to the spring of 1964.

Water level fluctuations are depicted graphically on hydrographs of 22 wells distributed among significant basins of the area. These wells were selected insofar as possible as representative of their respective basins or units. The hydrographs are presented in Figure C-1 by region, basin, and well number.

TABLE 1
SUMMARY OF GROUND WATER DATA
COLLECTED IN THE CENTRAL COASTAL AREA
July 1, 1993 to June 30, 1994

Ground Water Basin or Unit	Basin Number	Measuring or Sampling Agency	Number of Wells Measured	Number of Wells Sampled
REGION 1				
Potter Valley	1-14.00	U. S. Geological Survey	2	
Ukiah Valley	1-15.00	U. S. Geological Survey Mendocino County	2	11
Sonol Valley	1-16.00	U. S. Geological Survey Mendocino County	3	6
Alexander Valley	1-17.00	U. S. Geological Survey Department of Water Resources	6	6
Santa Rosa Valley	1-18.00	U. S. Geological Survey Department of Water Resources	3	
Santa Rosa Area	1-18.01		12	22
Healdsburg Area	1-18.02		4	1
Lower Russian River Valley	1-19.00	U. S. Geological Survey	3	
REGION 2				
Petaluma Valley	2-1.00	U. S. Geological Survey Sonoma County F. C. & W. C. D. Department of Water Resources	3 3	15 4
Napa-Sonoma Valley	2-2.00	U. S. Geological Survey Napa County Department of Water Resources	4	
Napa Valley	2-2.01		123	26
Sonoma Valley	2-2.02		3	10
Suisun-Fairfield Valley	2-3.00	U. S. Geological Survey Solano County Department of Water Resources	2 73 4	11
Pittsburg Plain	2-4.00	Department of Water Resources		3
Clayton Valley	2-5.00	Department of Water Resources		8
Ygnacio Valley	2-6.00	Department of Water Resources	5	7
Santa Clara Valley	2-9.00	Alameda County Water District Alameda County F. C. & W. C. D. Department of Water Resources	77	73
East Bay Area	2-9.01		59	24
			3	
South Bay Area	2-9.02	U. S. Geological Survey Santa Clara Valley W. C. D.	3 259	22
Livermore Valley	2-10.00	Alameda County F. C. & W. C. D.	177	37
Half Moon Bay Terrace	2-22.00	Department of Water Resources	8	
San Gregorio Valley	2-24.00	Department of Water Resources	5	
Pescadero Valley	2-26.00	Department of Water Resources	7	
REGION 3				
West Santa Cruz Terrace	3-26.00	Santa Cruz County	7	
Soquel Valley	3-1.00	Santa Cruz County Department of Water Resources	5 4	
Pajaro Valley	3-2.00	Monterey County F. C. & W. C. D. Santa Cruz County City of Watsonville Department of Water Resources	19 56 6 14	15 17
Gilroy-Hollister Valley	3-3.00	South Santa Clara County W. C. D. Santa Clara Valley W. C. D. Department of Water Resources	25	
South Santa Clara County	3-3.01		16	
			20	13
San Benito County	3-3.02	City of Gilroy Pacheco Pass Water District and San Benito County Department of Water Resources	5 90 5	14
Salinas Valley	3-4.00	Monterey County F. C. & W. C. D. San Luis Obispo County	437 51	70 31
Carmel Valley	3-7.00	Monterey County F. C. & W. C. D.	57	4

SURFACE WATER QUALITY

Surface water was sampled and analyzed both by the Department of Water Resources and by the U. S. Geological Survey in cooperation with the Department. The data from these sampling activities are shown in Appendix D of this report. The appendix includes data from a network of basic monitoring stations, operational stations on the South Bay Aqueduct and investigational stations. It includes all of the surface water quality data collected by this Department in the Central Coastal Area, except data from investigational stations in the San Francisco Bay system below Antioch. These data are specialized in nature and not included in this report. The stations for which data are reported in Appendix D are shown on Plate 4.

GROUND WATER QUALITY

During the year from July 1, 1963, through June 30, 1964, ground water samples were collected from 455 wells in the Central Coastal Area. These wells or stations were selected by the Department in the areas shown on Plate 3. Table 1 indicates the number of wells sampled in each basin and the sampling agency. The data from these stations are tabulated in Appendix E of this report.

Plate 5 depicts the status of sea water intrusion in the East Bay area of Santa Clara Valley. The 1964 line showing 350 parts per million chloride concentration is based on the spring 1964 analyses of samples from monitored wells shown on this plate. The 1962 line is based on the spring 1962 analyses for essentially the same station network.

Ground water is sampled and analyzed to provide information on the quality characteristics, to identify problem areas, to determine the quality

trends, and if possible, to identify the factors that control or affect the quality. Analyses made of ground water include mineral and radiological determinations. The frequency of sampling, types of analyses and density of the station network depend largely on conditions in the area being monitored.

APPENDIX A

CLIMATE

ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

Federal

United States Weather Bureau

United States Army Corps of Engineers

State

California Division of Highways

Local

Campbell Water Company

Livermore, City of

Marin County Engineer

Marin Municipal Water District

Napa, City of

Santa Clara County Flood Control and Water District

Santa Clara Valley Water Conservation District

Vallejo, City of

INTRODUCTION

This appendix contains station index, interim monthly precipitation, seasonal precipitation, interim monthly temperatures, monthly temperatures, interim monthly evaporation, and monthly evaporation tables. The tables of interim values present data for the months of July, August, and September 1963 and were necessitated by the change in report period from fiscal year (July through June) to water year (October through September). The data compiled are provided by governmental agencies, private industry and individuals.

Symbols and abbreviations used in this appendix are:

B	Adjusted to a full month.
C	Data from recorder stations.
D	Data unavailable for this report.
E	Evaporation.
e	Wholly or partially estimated.
M	All or part of record missing. When used in place of an average monthly temperature value, more than ten days of record are missing.
NR	No record.
P	Precipitation.
RB	Beginning of record.
RE	End of record.
SS	Observation at sunset.
T	Temperature.
T	Trace, an amount too small to measure.
V	Includes total for previous month.
Var	Observation time varied.

The numbering system used by the Department was developed to facilitate station identification by data processing machines. Station numbers are composed from three components - the drainage basin number, the alpha order number and the subnumber.

Drainage Basin Designation

The State was divided into major hydrographic areas, and each of these areas was assigned an alphabetical letter which is the first digit of the drainage basin number. The second digit was obtained by dividing the major hydrographic areas into stream basins of primary importance and assigning a number of 0-9 with 0 generally being the valley floor.

The major hydrographic areas and the sub-areas which are reported in this volume are as follows:

Hydrographic Area D

D0 - Santa Cruz Coast	D3 - Upper Salinas River
D1 - Pajaro-San Benito Rivers	D4 - Monterey Coast
D2 - Lower Salinas River	

Hydrographic Area E

E0 - San Francisco Bay	E4 - East Bay
E1 - Coast-Marin	E5 - Alameda Creek
E2 - Marin-Sonoma	E6 - Santa Clara Valley
E3 - Napa-Solano	E7 - Bayside-San Mateo
	E8 - Coast-San Mateo

Hydrographic Area F

F8 - Mendocino Coast
F9 - Russian River

Alpha Order Number and Subnumber

The four-digit alpha order numbers are assigned each station to denote its order in alphabetical sequence, mainly for machine processing. As the collection of data progressed, it was found necessary to add a subnumber of two digits to the four-digit alpha number to maintain the alphabetical order of all station names.

Climatological Station Index

Table A-1 includes the station name, number, and the county in which each station is located. It also includes the observer's name, station location, and elevation of the station. The time of observation, beginning of record, and cooperator number complete the information on this table. The cooperator number indicates the source of the data. The cooperator numbers assigned are as follows:

000	Private Cooperator
403	Sonoma County Flood Control and Water Conservation District
407	San Benito County
411	Marin County
413	Marin Municipal Water District
414	Santa Clara Valley Water Conservation District
418	Vallejo Water Department
426	Santa Clara County Flood Control and Water District
801	Pomology Department, U. C., Davis
804	State Department of Beaches and Parks
806	State Department of Water Resources
808	State Division of Forestry
809	State Division of Highways
900	U. S. Weather Bureau
901	Corps of Engineers, San Francisco District
902	U. S. Air Force
907	State Climatologist (unpublished USWB)
909	U. S. Soil Conservation Service

Interim Monthly Precipitation

Table A-2 presents total monthly precipitation in inches for the months of July, August, and September 1963.

Seasonal Precipitation

Table A-3 presents total monthly and seasonal precipitation in inches for the year from October 1, 1963 through September 30, 1964.

Interim Monthly Temperatures

Table A-4 for the period July through September 1963 includes the maximum and minimum temperatures, the average of the daily maximum temperatures, the average of the daily minimum temperatures and the average of the daily maximum and minimum temperatures recorded during the month. The temperatures are recorded in degrees Fahrenheit.

Monthly Temperatures

Table A-5 presents the same type of temperature data as in Table A-4 but for the period October 1, 1963 through September 30, 1964.

Interim Monthly Evaporation

Table A-6 presents total evaporation during each month in inches, total wind movement during the month in miles, the monthly average of daily maximum water temperatures and the monthly average of daily minimum water temperatures for the period July through September 1963.

Monthly Evaporation

Table A-7 presents the same type of data as in Table A-6 but for the period October 1, 1963 through September 30, 1964.

TABLE A-1
CLIMATOLOGICAL STATION INDEX

STATION NAME	STA NUMBER	COUNTY	OBSERVER	LATITUDE ° ' "	LONGITUDE ° ' "	ELEV FEET	TOWNSHIP RANGE	SECTION 40 ACRE TRACT	TIME OF OBSERVATION P T E	RECORD BEGAN	COOP NO.
Salinas 2 E	D2 7668	Monterey	Fire Dept.	36 40	121 37	80	14S 3E 34	5A	SP SP	1958	900
Salinas FMA Airport	D2 7669	Monterey	Fed. Av. Agency	36 40	121 36	80	14S 3E 34	C	C	1873	900
Salinas Dam	D3 7672	San Luis Obispo	Dam Operator	35 20	120 30	1386	30S 14E 8	8A	SP	1942	900
San Anselmo	E2 7707+01	Marin	Marin Co. Engr.	38 58	122 33	42	100 2N 6W 7	7	D	1957	411
San Antonio Mission	D3 7714	Monterey	San Antonio Msn.	36 01	121 15	1060	22S 7E 18	5P SP	SP	1959	900
San Ardo	D2 7716	Monterey	W. Rosenberg	36 00 48	120 54 06	443	22S 10E 16	K	8A	1894	900
San Benito	D1 7719	San Benito	J. Shields	36 30 30	121 04 54	1355	16S 8E 27	H	C	1936	900
San Clemente Dam	D4 7731	Monterey	Wtr. & Tel. Co.	36 26 12	121 02 30	600	17S 2E 23	7A	C	1940	900
San Felipe Highway Station	D1 7755	Santa Clara	Div. of Highways	37 01	121 20	965	10S 6E	7	C	1943	900
San Francisco Richmond Sunset	E8 7767	San Francisco	San Francisco	37 46	122 30	303	2S 6W	C	SP	1948	900
San Francisco WMAP	E7 7769	San Mateo	USWB	37 37	122 23	8	3S 3W	C	C	1928	900
San Francisco Fed. Office Bldg.	E7 7772	San Francisco	USWB	37 47	122 23	52	2S 6W	C	?	1931	900
San Gregorio 3 SE	E8 7807	San Mateo	Pomponio Rauch	37 18	122 20	355	7S 4W 30	5P SP	SP	1954	900
San Jose	E6 7821	Santa Clara	E. Billwiler	37 21	121 54	70	7S 1E	C	C	1874	900
San Jose Decid. F.F.S.	E6 7824	Santa Clara	A. Amstutz	37 19	121 57	90	7S 1W 15	J	C	1935	801
San Juan Bautista Mission	D1 7835	San Benito	B. A. Farber	36 50 42	121 32 00	200	12S 4E	8A	Var	1900	804
San Lucas Guadalupe	D2 7845-10	Monterey	DWR - L&M	36 07 25	121 01 09	380	21S 9E 8	8	Var	1962	806
San Mateo	E7 7864	San Mateo	Fire Dept.	37 34	122 19	30	4S 4W 29	5P SP	SP	1874	900
San Rafael	E2 7880	Marin	City Engr.	37 58	122 32	31	2N 6W	5P SP	SP	1948	900
San Rafael Nat. Bank	E2 7880-08	Marin	Crocker Cit. Bank	37 58 24	121 31 30	25	2N 6W	8A	C	1876	413
Santa Clara University	E6 7912	Santa Clara	Santa Clara Univ.	37 21	121 36	88	7S 1W	5P SP	SP	1881	900
Santa Cruz	D0 7916	Santa Cruz	R. Burton	36 59	122 01	125	11S 1W	8P SE	SP	1864	900
Santa Rita Muther	D2 7959-10	Monterey	DWR - L&M	36 45 00	121 41 24	80	14S 3E 12	H	Var	1962	806
Santa Rosa Sewage Plant	F9 7964	Sonoma	M. McKinnin	38 26 24	122 45 12	20	7N 8W 21	F	8A 8A 8A	1956	000
Santa Rosa	F9 7965	Sonoma	C. Newberry	38 27	122 42	167	7N 8W	7A	7A	1888	900
Santa Rosa Pedraza	F9 7965-03	Sonoma	DWR - L&M	38 21 38	122 44 31	90	6N 8W 16	R	Var	1962	806
Saratoga-Clarke	E6 7998-01	Santa Clara	J. Clarke	37 16 48	121 59 42	272	7S 1W 31	7A	7A	1956	414
Saratoga-Kriege	E6 7998-01	Santa Clara	B. Kriege	37 15	122 02	240	8S 2W 1	7A	7A	1960	414
Searsville Lake	E6 8068	San Mateo	A. Clapp	37 24	122 14	350	6S 3W 12	8A	8A	1949	900
Sebastopol 4 SSE	F9 8072	Sonoma	C. Nahmens	38 21	122 49	150	6N 9W 6	C	C	1935	900
Shaggs Spr. Las Lunas Ranch	D2 8272	Sonoma	J. Leithold	38 41	123 08	1938	10N 12W 36	8A	C	1939	900
Slack Canyon	D9 8776	Monterey	Div. of Forestry	36 05	120 40	1730	21S 12E 22	C	C	1955	900
Soledad CTF	D2 8308-01	Monterey	F. F. Bontadelli	36 28 26	121 22 34	230	17S 5E 12	B	9A 9A 9A	1961	000
Soledad	D2 8338	Monterey	J. Francioni	36 28	121 19	204	17S 6E	8A	8A	1874	900
Sonoma	E2 8351	Sonoma	L. Dickey	38 17	122 27	20	5N 5W 4	5P SP	SP	1952	900
Spreckels Hwy. Bridge	D2 8446	Monterey	B. Hennes	36 36	121 41	60	15S 3E	8A	8A	1905	900
Spreckels	D2 8446-01	Monterey	Spreckels Sugar	36 37	121 39	48	15S 3E	8A	8A	1905	000
Spreckels Hill-Laguna Seca	E6 8447	Santa Clara	SCWCD	37 12	121 44	384	9S 2E	8A	D	414	
Stevens Creek Reservoir	E6 8519	Santa Clara	SCWCD	37 18	122 05	600	7S 2W 28	H	8A	1937	414
Suey Ranch	D6 8627	San Luis Obispo	Suey Ranch	34 59 40	120 22 35	390	9N 3W	5P	SP	1909	900
Sunset Beach State Park	D1 8680	Santa Cruz	Bch. & Paris	36 54	121 50	85	11S 1E	8A	C	1956	900
Talmage	F9 8776-01	Mendocino	L. G. Von Schiltz	39 08	123 11	413	15N 12W 10	8A	C	1953	900
Tamalpais Valley	E2 8779	Marin	Clessner	37 52 42	122 32 36	250	1N 6W	8A	8A	1959	901
Templeton	D3 8849	San Luis Obispo	A. Willhoit	35 32 56	120 42 21	773	27S 12E 29	8A	8A	1886	000
The Geysers	F9 8885	Sonoma	F. Devey	38 48	122 49	1600	11N 9W 23	C	C	1939	900
Tiburon-Topham	E2 8920-21	Marin	H. Topham	37 52 24	122 27 12	400	1S 5W 4	9A	9A	1960	000
Travis Air Force Base	E3 9006	Solano	U.S.A.F.	38 16	121 56	50	5N 1W 24	E	8A	1943	902
Ukiah	F9 9122	Mendocino	Fire Dept.	39 05	123 12	623	15N 12W 17	5P SP	SP	1877	900
Ukiah 4 NW	F9 9124	Mendocino	M. Bory	39 08	123 17	1900	13N 13W 27	8A	8A	1951	900
Upper Morro Creek	D6 9179	San Luis Obispo	E. Purser	35 07 18	120 45 12	1050	28S 11E 35	B	7A	1951	000
Upper San Leandro Filters	E4 9185	Contra Costa	East Bay MUD	37 46	122 10	390	2S 3W 11	G	7A 7A	1944	900
Upper Tres Pinos	D1 9189	San Benito	R. Froucher	36 38	121 02	2050	15S 9E 7	C	C	1940	900
Vallejo	D3 9221	Monterey	A. Curtis	35 53	120 42	950	23S 12E 32	C	C	1940	900
Vasona Reservoir	E6 9270	Santa Clara	SCWCD	37 14 36	121 58 00	300	8S 1W 15	8A	8A	1962	414
Venado	F9 9273	Sonoma	J. Harper	38 37	123 01	1260	9N 10N 19	C	C	1939	900
Veterans Home	E3 9305	Napa	B. Barboza	38 23	122 22	170	6N 5W 1	8A	8A	1912	000
Walnut School	E4 9420	Contra Costa	M. Dennis	37 57	122 05	128	1N 2W	5P	SP	1954	900
Walnut Creek 2 ESE	E4 9423	Contra Costa	R. Whittemore	37 53	122 02	245	1N 2W 36	8A	8A	1887	900
Walnut Creek 2 ENE	E4 9426	Contra Costa	T. Vaselek	37 54	122 01	220	1N 2W 30	8A	8A	1944	900
Walnut Creek 4 E	E4 9427	Contra Costa	E. Irving	37 54	121 59	400	1N 1W	9A	9A	1954	900
Watsonville Water Works	D1 9473	Santa Cruz	L. Bechis	36 56	121 46	95	11S 2E 32	8A	8A	1880	900
Wildner Ranch	D0 9675	Santa Cruz	D. R. Wilder	36 57 36	122 05 24	50	11S 2W 22	5P	SP	1924	000
Wild Horse Valley	E3 9675-41	Solano	G. Stiltz	38 17 53	122 11 13	1240	5N 3W 10	0	8A 2P	D	418
Woodacre	F9 9770	Marin	Div. of Forestry	38 00 24	122 38 30	430	2N 7W	2P	2P	1950	808
Wright	E6 9814	Santa Clara	M. Ware	37 08	121 57	1600	9S 1W 23	5P	SP	1918	903
Yorkville	F8 9851	Mendocino	L. Hulbert	38 55	123 16	1100	12N 13W 2	C	C	1939	900
Yountville Gamble	E3 9861	Napa	DWR - L&M	38 26 05	122 22 05	120	7N 5W 24	F	Var	1962	806

TABLE A-2

INTERIM MONTHLY PRECIPITATION 1963 IN INCHES

STATION NUMBER	STATION NAME	JULY	AUG.	SEPT.	STATION NUMBER	STATION NAME	JULY	AUG.	SEP.
E6 0053	Alamitos Perc. Pond	0	T	.16	E2 4500	Kentfield	0	T	.13
E4 D064	Alamo 1 N	0	T	.27	F9 4502	Kent Lake	0	0	.08
E6 0125	Almaden Reservoir	0	0	.17E	D2 4555	King City	0	0	.23
F9 0135	Alpine Dam	0	0	.07	E4 4633	Lafayette 2 NNE	0	0	.37
E3 0212	Angwin Pacific Union College	0	0	T	F9 4652	Lagunitas Lake	0	0	M
D2 0322	Arroyo Seco	0	0	.20	E8 4660	La Honda	0	.03	.40
D3 0360-01	Atascadero HHS	0	.02	.19	E3 4677	Lake Curry	0	0	.38
E3 0372	Atlas Road	0	0	.17	E6 4916	Leroy Anderson Dam	0	0	.14
D0 0674	Ben Lomond	0	0	.24	E6 4922	Lexington Reservoir	0	T	.35
E4 0693	Berkeley	0	.06	.10	D3 4963	Linn Ranch	0	0	.20
E6 0706	Berryessa 1 E (Toyon Ave.)	0	0	.10	E5 4996	Livermore Sewage Plant	0	.05	.36
D4 0790	Big Sur State Park	0	T	.03	E5 4997	Livermore 2 SSW	0	T	.33
E6 0850	Black Mountain 2 SW	0	.01	.18	D3 5017	Lockwood 2 N	0	0	.23
F9 0876	Blakes Landing	0	0	0	E6 5123	Los Gatos	0	0	.46
F9 0969	Don Tempe Dam	0	0	0	E6 5123-04	Los Gatos-Old Orchard Road	0	.01	.21
F8 0973	Boonville HHS	0	0	.01	D0 5125	Los Gatos 4 SW	0	0	.17
F8 0973-02	Boonville Farrer	0	0	T	D4 5184	Lucia Willow Springs	0	0	.08
D4 0998-27	Bouchers Gap	0	0	.07	E3 5333	Nore Island	0	.05	.38
D3 1035	Bradley	0	0	.09	E4 5371	Martinez 3 S	0	0	.25
D1 1170	Buena Vista	0	0	.29E	E4 5372	Martinez 3 SSE	0	0	.52
E7 1206	Burlingame	0	0	.15	E4 5377	Martinez Fire Station	0	T	.25
E4 1216	Burton Ranch	0	.01	.24	D2 5477	Mill Valley	0	0	.06
D1 1247	Buzzard Lagoon	0	0	.32	D4 5795	Monterey	M	M	M
E5 1281	Calaveras Reservoir	0	0	.06	E6 5844	Morgan Hill 2 E	0	T	.17
E6 1285	Calera Reservoir	0	0	.15	E6 5846	Morgan Hill 6 WNW	0	0	.22
E3 1312	Calistoga	0	0	T	D1 5853	Morgan Hill SCS	0	0	.13
E6 1341-10	Cambrian Park	0	.01	.21	D6 5869	Norro Bay 3 N	0	T	.14
E6 1377-01	Campbell Water Co.	0	0	.34	E4 5915	Mt. Diablo North Gate	0	0	.20
D4 1534	Carmel Valley	0	.02	.17	E5 5933	Mt. Hamilton	0	.15	.08
F9 1602	Cazadero	0	0	.10	D1 5973	Mt. Madonna	0	0	.13
D1 1739	Chittenden Pass	0	.03	.42	D1 5973-11	Mt. Madonna County Park	.02	.09	.29
D1 1739-01	Chittenden	0	T	.33	E2 5996	Mt. Tamalpais 2 SW	0	0	.27
D1 1766	Cienaga	0	0	.25	E2 6027	Muir Woods	.01	.01	.26
F9 1838	Cloverdale 3 SSE	0	0	.15	E3 6065	Napa	0	0	.15
F9 1840	Cloverdale 11 W	0	0	0	E3 6068	Napa-Haven	0	T	.15
E4 1962	Concord 3 E	0	.02	.26	E3 6074	Napa State Hospital	0	T	.29
E3 1976	Conn	0	0	0	F9 6105	Navarro 1 NW	0	0	0
F9 2105	Coyote Dam - Lake Mendocino	0	T	0	E5 6144	Network	0	.01	.09
E6 2109	Coyote Reservoir	0	.03	.19	F9 6187	Nicastro	0	0	0
D0 2139	Crest Ranch	0	0	.28	E2 6290	Novato 8 WNW	0	0	.05
E4 2177	Crockett	0	.02	.10	E2 6290-02	Novato Fire House	0	0	0
D0 2290	Duvenport	.01	.07	.26	E4 6335	Oakland WBAF	0	.01	.28
D2 2362	Del Monte	0	0	.41	E3 6351	Oakville 1 WNW	M	M	M
E3 2580	Duttons Landing	0	T	.32	E3 6354	Oakville 4 SW	0	0	.0E
E6 2919	Evergreen - Silver Creek Rd.	0	T	.13	E3 6356	Oakville 4 SW No. 2	NR	NR	NR
E3 2933	Fairfield	0	0	.33	F9 6370	Occidental	0	0	.16
E3 2934	Fairfield Police Station	0	T	.40	D1 6610	Palmdale Okruall Ranch	0	0	.24
F8 3161	Fort Bragg	.01	.07	.19	E7 6646	Palo Alto City Hall	0	.05	.17
F8 3164	Fort Bragg Aviation	0	.05	.03	D2 6650	Paloma	0	.03	.25
F8 3191	Fort Ross	T	T	.15	D3 6703	Parkfield	0	T	.32
D1 3232	Freedom 8 NWN	0	.02	.28	D3 6706	Parkfield 7 NWN	0	0	.20
D1 3238	Fremont Peak State Park	0	0	.60	E6 6791-43	Penitencia Rain Gage	0	0	.16
E3 3287	Gerber Ranch	0	.01	.24	E2 6826	Petaluma Fire Station No. 2	0	0	.05
D1 3417	Gilroy	0	T	.36	E2 6826-D1	Petaluma - Burns	0	0	0
D1 3419	Gilroy 8 NE	0	0	.27	E2 6829	Petaluma 1 N	0	0	.09
D1 3422	Gilroy 14 ENE	0	0	.25	F9 6853	Phoenix Lake Dam	0	0	.08
D2 3502	Gonzales 9 ENE	0	0	.17	D4 6856	Pico Blanco B.S. Camp	RE	0	0
F9 3577	Graton	0	0	.04	D2 6926	Pinnacles National Monument	0	0	.13
F9 3578	Graton 1 W	0	0	.03	E5 6991-05	Pleasanton Nursery	0	T	.20
E3 3612-01	Green Valley	0	0	.36	F8 7009	Point Arena	0	D	.15
E6 3681	Gualdalupe Reservoir	0	0	.18	D5 7024	Point Piedras Blancas	0	0	.18
F9 3683	Guerneville	0	T	T	E4 7070	Port Chicago NAD	0	T	.16
E8 3714	Half Moon Bay 2 NWN	0	.03	.09	E8 7086	Portola State Park	0	0	.38
D3 3722	Hames Valley	M	M	M	F9 7107	Potter Valley 3 NWN	0	0	.20
E4 3863	Hayward 6 ESE	0	0	.07	F9 7108	Potter Valley 3 SE	0	0	.20
F9 3875	Healdsburg	0	T	.01	F9 7109	Potter Valley PH	0	0	.27
F9 3878	Healdsburg 2 E	0	.02	.01	D2 7150	Priest Valley	0	T	.25
D1 3928	Healdsburg 7 SE	0	.10	.91	D1 7190	Quien Sabe Hay Camp	0	T	.24
D1 4022	Hollister	0	T	.21	D1 7249	Rancho Quien Sabe	0	0	.12
D1 4022-10	Hollister Costa	T	.02	.13	E7 7339	Redwood City	0	T	.29
D1 4025	Hollister No. 2	0	0	.30	E4 7414	Richmond	0	.03	.13
D1 4035	Hollister No. 1	0	0	.27	D4 7539-01	St. Helena Ranch	0	.03	.04
F9 4100	Hopland Largo Station	0	T	.15	E3 7643	St. Helena	0	0	0
F9 4277	Inverness-Nery	0	0	0	E3 7646	St. Helena 4 WSW	0	0	0
F9 4480	Kellogg	0	.02	.09	E4 7661	St. Mary's College	0	T	.30

TABLE A-2

INTERIM MONTHLY PRECIPITATION 1963 IN INCHES									
STATION NUMBER	STATION NAME	JULY	AUG.	SEPT.	STATION NUMBER	STATION NAME	JULY	AUG.	SEPT.
D2 7668	Salinas 2 E	0	.02	.36					
D2 7669	Salinas FAA Airport	T	T	.34					
D3 7672	Salinas Dam	0	.20	.38					
D2 7707-01	San Anselmo	0	0	.02					
D3 7714	San Antonio Mission	0	0	.09					
D2 7716	San Ardo	0	0	.07					
D1 7719	San Benito	0	0	.05					
D4 7731	San Clemente Dam	0	0	.09					
D1 7755	San Felipe Highway Station	0	0	.22E					
E8 7767	San Francisco Richmond Sunset	0	0	.36					
E7 7769	San Francisco WBAF	0	0	.07					
E7 7772	San Francisco Fed. Off. Bldg.	0	0	.06					
E8 7807	San Gregorio 3 SE	.02	.04	.35					
E6 7821	San Jose	0	T	.25					
E6 7824	San Jose Decid FFS	0	0	.29					
D1 7835	San Juan Bautista Mission	0	0	.20					
D2 7845-10	San Lucas Guidici	0	0	.12					
E7 7864	San Mateo	0	T	.17					
E2 7880	San Rafael	0	0	0					
E2 7880-08	San Rafael National Bank	0	T	.03					
E6 7912	Santa Clara University	0	T	.25					
D0 7916	Santa Cruz	.02	.06	.16					
D2 7959-10	Santa Rita Muther	.01	.03	.41					
F9 7964	Santa Rosa Sewage Plant	0	T	.07					
F9 7965	Santa Rosa	0	.01	.09					
F9 7965-03	Santa Rosa Pedranzini	T	T	0					
E6 7998-01	Saratoga - Clarke	0	.01	.22					
E6 7998-03	Saratoga - Kriege	0	.01	.24					
E6 8068	Searsville Lake	0	T	.35					
F9 8072	Sebastopol 4 SSE	0	0	.09					
F9 8272	Skaggs Spgs. Las Lomas Ranch	0	0	.04					
D2 8276	Slack Canyon	0	0	.17					
D2 8338	Soledad	0	T	.29					
D2 8338-01	Soledad CTF	0	0	0					
E2 8351	Sonoma	0	T	.03					
D2 8446	Spreckels Highway Bridge	0	T	.29					
D2 8446-01	Spreckels	0	0	.36					
E6 8447	Spreckels Hall-Laguna Seca	0	0	.15					
E6 8519	Stevens Creek Reservoir	0	0	.36					
D6 8627	Suey Ranch	0	0	.40					
D1 8680	Sunset Beach State Park	0	0	.27					
F9 8776-01	Tahmase	0	0	.03					
E2 8779	Tamalpais Valley	0	.03	.18					
D3 8849	Templeton	0	.03	.19					
F9 8885	The Geysers	0	0	.05					
E2 8920-21	Tiburon - Topham	0	0	.10					
E3 9006	Travis Air Force Base	0	0	.23					
F9 9122	Ukiah	0	0	T					
F9 9124	Ukiah 4 MSW	.01	.01	.09					
D6 9179	Upper Morro Creek	0	.02	.23					
E4 9189	Upper San Leandro Filters	0	.05	.23					
D1 9189	Upper Tres Pinos	0	0	.20					
D3 9221	Vallerton	0	0	.23E					
E6 9270	Vasona Reservoir	0	T	.32					
F9 9273	Venado	0	0	.09					
C3 9305	Veteran's Home	0	0	.05					
C4 9420	Walmar School	0	0	.05					
E4 9423	Walnut Creek 2 ESE	0	0	.23					
C4 9424	Walnut Creek 2 ENR	0	0	.21					
C4 9427	Walnut Creek 4 E	0	0	.20					
D1 9473	Watsonville Water Works	0	.04	.30					
D0 9673	Wilder Ranch	0	0	.25					
E3 9673-11	Wild Horse Valley	0	T	.38					
F9 9770	Woodacre	0	0	.03					
E6 9814	Wright	0	0	.18					
F8 9851	Yorkville	0	0	0					
E3 9861	Yountville Garage	T	0	.01					

TABLE A-3

SEASONAL PRECIPITATION 1963-64

IN INCHES

NUMBER	STATION NAME	TOTAL	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
F4 9770	Woodacre	28.37	3.55	10.24	1.19	6.40	.31	3.81	.43	.82	1.58	T	.04	0
E6 9814	Wrights	27.67	3.83	9.85	.22	7.21	.30	3.13	.30	1.23	1.32	0	.28	0
F8 9851	Yorkville	30.20	5.13	10.13	1.57	7.61	.33	3.04	.28	1.39	.70	.02	0	0
E3 9861	Yountville Gamble	17.28	2.32	6.44	.82	4.27	.18	2.23	.14	.21	.61	.03	.03	0

TABLE A-4

INTERIM MONTHLY TEMPERATURE 1963

IN DEGREES FAHRENHEIT

STATION NUMBER	STATION NAME	JULY	AUG.	SEPT.	STATION NUMBER	STATION NAME	JULY	AUG.	SEPT.
E6 0053	Alamitos Perc Pond	Max 96 Min 46 Avg Max 81.4 Avg Min 51.6 Avg 66.5	94 98 46 50 82.1 81.9 52.2 55.6 67.2 68.6		F9 3578	Graton 1W	Max 97 Min 42 Avg Max 82.2 Avg Min 68.0 Avg 65.1	97 96 43 44 85.3 82.0 47.7 49.4 66.3 63.7	
E4 0064	Alamo LN	Max 97 Min 34 Avg Max 84.0 Avg Min 51.3 Avg 67.6	99 100 43 47 86.9 84.6 52.4 54.3 69.6 69.4		S8 3714	Half Moon Bay 2NNW	Max 69 Min 46 Avg Max 65.0 Avg Min 51.5 Avg 58.3	73 73 46 48 64.1 67.0M 51.0 52.3M 57.6 59.7M	
E3 0212	Angwin Pac. Union Col.	Max 96 Min 40 Avg Max 85.4 Avg Min 50.5 Avg 68.0	98 99 45 47 86.2M 83.0 54.8M 56.3 70.5M 69.7		E2 3734	Hamilton AFB	Max 95 Min 45 Avg Max 76.1 Avg Min 51.5 Avg 63.8	92 96 48 48 80.8 80.1 53.1 54.1 67.0 67.1	
D3 0360-01	Atascadero RMS	Max 102 Min 44 Avg Max 91.2 Avg Min 53.4 Avg 72.3	102 105 44 50 91.0 89.6 53.6 55.5 72.3 72.6		F9 3875	Healdsburg	Max 102 Min 41 Avg Max 88.5 Avg Min 50.6 Avg 69.6	104 105 47 48 90.6 89.5 52.9 56.0 71.8 71.8	
00 0674	Ben Lomond	Max 93 Min 41 Avg Max 80.6 Avg Min 46.9 Avg 63.8	92 98 44 42 81.5 83.6 47.8 47.5 84.7 85.6		D1 4022	Hollister	Max 94 Min 44 Avg Max 79.1 Avg Min 49.5 Avg 64.3	96 103 42 47 79.8M 86.5 50.2M 51.8 65.0M 68.2	
E4 0693	Berkeley	Max 88 Min 31 Avg Max 70.7 Avg Min 54.5 Avg 62.6	82 87 51 53 70.8 73.6 53.8 56.4 62.3 65.0		F9 4277	Inverness-Mery	Max NR Min NR Avg Max NR Avg Min NR Avg NR	NR NR NR NR NR NR NR NR NR NR	
E7 1206	Burlingame	Max 92 Min 44 Avg Max 75.8 Avg Min 50.6 Avg 63.2	85 89 44 47 75.9 78.4 49.8 53.5 62.9 66.0		E2 4500	Kentfield	Max 97 Min 44 Avg Max 80.2 Avg Min 50.8 Avg 65.3	96 98 46 47 82.8M 83.4M 50.6M 53.6M 66.7M 68.5M	
D4 1534	Carmel Valley	Max 93 Min 41 Avg Max 76.2 Avg Min 45.6 Avg 60.9	93 96 39 46 72.1 81.4 47.6 50.8 62.4 66.1		D2 4555	King City	Max 97 Min 35 Avg Max 82.7 Avg Min 48.9 Avg 65.8	96 97 44 43 83.5 87.0 49.6 51.6 66.6 69.3	
F9 1838	Cloverdale 35SE	Max 103 Min 46 Avg Max 87.4 Avg Min 52.7 Avg 70.1	102 106 46 48 89.2 86.8 53.3 53.8 71.3 70.3		E6 4922	Lexington Reservoir	Max 97 Min 41 Avg Max 84.2 Avg Min 48.7 Avg 66.7	98 97 41 46 85.4 86.7 50.0 51.9 67.1 68.3	
F9 2105	Coyote Dam (Lake Mendocino)	Max 102 Min 41 Avg Max 86.9 Avg Min 49.0 Avg 68.0	104 106 42 46 91.0 90.0 50.6 49.2 70.8 69.6		D3 4963	Linn Ranch	Max 99 Min 47 Avg Max 90.3 Avg Min 53.1 Avg 71.7	99 100 46 49 89.0 88.0 53.5 56.8 71.3 71.4	
E6 2109	Coyote Reservoir	Max 98 Min 44 Avg Max 84.7 Avg Min 49.2 Avg 67.0	96 106 40 45 85.4 86.5 49.6 51.7 67.5 69.1		E5 4996	Livermore Sewage Plant	Max 98 Min 42 Avg Max 83.3 Avg Min 47.2 Avg 65.2	96 105 39 46 85.3 85.3 48.0 52.7 65.8 68.8	
E4 2177	Crockett	Max 96 Min 31 Avg Max 82.2 Avg Min 54.3 Avg 68.3	98 106 51 53 84.1 83.6 53.2 57.7 69.7 70.7		E5 4997	Livermore 2SSW	Max 98 Min 43 Avg Max 85.8 Avg Min 49.8 Avg 67.8	99 105 43 45 88.1 86.1 50.3 52.0 69.2 69.1	
D0 2290	Davenport	Max 73 Min 45 Avg Max 63.7 Avg Min 50.3 Avg 57.0	73 77 48 50 64.0 68.9 53.0 53.3 58.5 61.1		E6 5123	Los Gatos	Max 97 Min 40 Avg Max 81.4 Avg Min 48.0 Avg 64.7	92 101 41 44 83.6 85.9 48.0 51.6 65.8 67.3	
E3 2580	Buttons Landing	Max 95 Min 45 Avg Max 79.2M Avg Min 51.7M Avg 65.3M	94 102 48 49 79.8 83.2 52.6 53.8 66.2 68.5		E3 5333	Mare Island Naval ST	Max 97 Min 46 Avg Max 82.2 Avg Min 60.2 Avg 71.2	93 99 56 55 81.6 83.0 60.2 62.3 70.9 72.6	
E3 2934	Fairfield Police Sta.	Max 101 Min 45 Avg Max 86.7 Avg Min 54.2 Avg 70.5	102 106 52 50 88.7 89.5 56.8 56.9 72.8 73.2		E4 5377	Martinez Fire Sta.	Max 97 Min 46 Avg Max 85.2 Avg Min 54.1 Avg 69.7	93 99 56 50 86.0 84.4 54.5 56.4 70.3 70.4	
D1 3238	Fremont Peak State Pk.	Max 94 Min 43 Avg Max 83.3 Avg Min 59.4 Avg 71.4	94 102 43 45 82.0 79.8 61.9 60.2 72.0 70.0		D4 5795	Monterey	Max M Min M Avg Max M Avg Min M Avg M	M M M M M M M M M M	
01 3417	Gilroy	Max 94 Min 46 Avg Max 85.9 Avg Min 50.4 Avg 68.2	99 108 44 44 87.4 87.9 51.2 53.6 71.3 70.8		E4 5915	Mt. Diablo North Gate	Max 97 Min 45 Avg Max 83.8 Avg Min 55.5 Avg 69.7	99 105 42 44 86.3 83.8 60.0 58.5 73.2 71.2	
F9 3557	Graton	Max 97 Min 42 Avg Max 81.2 Avg Min 50.2 Avg 65.7	95 96 44 46 83.5 83.3 49.2 51.7 66.4 67.3		E5 5933	Mt. Hamilton	Max 94 Min 43 Avg Max 75.1M Avg Min 58.0M Avg 66.6M	86 90 42 44 76.5 76.0M 60.5 58.7M 68.5 67.4M	

INTERIM MONTHLY TEMPERATURE 1963

-25-

TABLE A-5

MONTHLY TEMPERATURES 1963-64														
IN DEGREES FAHRENHEIT														
NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E6-0053	Alamitos Perc. Pond	Max	87	70	72	64	75	79	87	82	99	95	101	99
		Min	39	36	29	30	30	26	35	34	41	45	48	44
		Avg Max	73.4	62.6	55.5	57.0	63.9	63.8	69.1	69.9	76.3	82.9	81.5	81.4
		Avg Min	51.0	42.9	35.1	37.6	38.0	39.0	42.8	45.1	50.2	53.9	54.1	51.8
		Avg	62.2	52.8	45.3	47.3	51.0	51.4	56.0	57.5	63.2	68.4	67.8	66.6
E4-0064	Alamo 1 N	Max	92	71	59	61	72	76	87	86	101	101	99	96
		Min	39	35	30	29	29	29	34	37	42	46	42	43
		Avg Max	73.2	60.5	48.6	54.3	60.7	63.0	70.3	71.6	79.0	87.5	89.7	81.0
		Avg Min	48.6	41.4	34.8	35.4	35.4	37.1	40.8	44.3	50.4	52.1	54.3	49.5
		Avg	60.9	51.0	41.7	44.9	48.1	50.0	55.6	58.0	64.7	69.8	72.0	65.2
E3-0212	Angwin Pacific Union College	Max	92	66	62	61	71	74	83	82	99	99	99	98
		Min	40	36	33	29	26	29	28	27	37	43	44	38
		Avg Max	68.1	56.6	54.9	50.5	60.3	57.6	66.5	70.6	78.3	87.8	88.0	81M
		Avg Min	50.9	44.7	40.3	36.7	39.9	38.3	39.9	41.6	48.8	53.2	53.1	49M
		Avg	59.5	50.7	47.6	43.6	50.1	48.0	53.2	56.1	63.6	70.5	70.6	65M
D3-0360-01	Atascadero HMS	Max	96	80	73	76	76	80	94	88	106	105	104	100
		Min	38	32	24	24	25	24	31	34	42	46	46	40
		Avg Max	79.3	65.9	67.6	62.8	66.5	65.5	70.8	74.8	85.8	93.9	94.7	83.2
		Avg Min	48.9	39.3	30.2	31.0	29.9	34.4	39.3	41.7	50.9	55.1	56.2	47.4
		Avg	64.1	52.6	48.9	46.9	48.2	50.0	55.0	58.2	68.4	74.5	75.4	65.3
D0-0674	Ben Lomond	Max	92	71	67	63	72	72	84	82	88	93	93	98
		Min	36	32	28	29	30	29	33	33	42	41	45	40
		Avg Max	75.2	60.9	61.0	57.0	63.7	64.4	67.2	68.8	76.4	83.1	82.4	79.5
		Avg Min	45.9	40.5	34.2	35.3	33.4	35.8	39.7	42.9	49.9	49.4	48.0	47.2
		Avg	60.6	50.7	47.6	46.2	48.6	50.1	53.5	55.9	63.2	66.3	65.2	63.4
E4-0693	Berkeley	Max	75	68	63	62	75	75	85	72	83	82	87	91
		Min	45	41	34	37	39	36	40	43	49	51	53	51
		Avg Max	68.3	61.0	54.6	54.7	61.5	59.7	62.6	61.9	68.3	69.9	69.5	71.0
		Avg Min	52.9	48.0	39.7	41.7	43.5	43.5	46.3	48.1	52.4	53.8	55.4	55.0
		Avg	60.6	54.5	47.2	48.2	52.5	51.6	54.5	55.0	60.4	61.9	62.5	63.0
E7-1206	Burlingame	Max	81	70	62	61	75	76	85	78	89	95	94	95
		Min	41	37	29	31	31	33	34	37	45	46	47	44
		Avg Max	72.0	62.7	53.7	57.2	63.8	63.9	67.1	67.8	73.9	78.0	78.8	78.4
		Avg Min	50.5	44.3	37.1	38.8	37.8	41.5	42.4	45.4	50.6	52.3	51.9	49.3
		Avg	61.3	53.5	45.4	48.0	50.8	52.7	54.8	56.6	62.3	65.2	65.4	63.9
D4-1534	Carmel Valley	Max	81	80	78	69	82	80	92	76	85	88	91	98
		Min	38	32	29	30	28	29	32	33	37	39	39	36
		Avg Max	74.9	67.3	67.3	61.6	66.6	63.2	65.7	66.1	72.6	75.3	77.5	77.3
		Avg Min	47.8	43.1	38.6	36.8	35.0	36.4	39.2	40.5	46.0	47.6	47.0	47.0
		Avg	61.4	55.2	53.0	49.2	50.8	49.8	52.5	53.3	59.3	61.5	62.3	62.2
F9-1838	Cloverdale 3 SSE	Max	90	74	64	68	81	82	92	87	104	105	104	107
		Min	42	34	29	30	29	33	34	38	44	47	48	42
		Avg Max	71.9	61.7	52.9	55.1	66.3	64.3	69.6	73.3	81.9	91.9	91.9	85.6
		Avg Min	48.4	41.3	34.3	36.2	36.1	39.2	41.8	44.4	51.7	52.2	53.5	49.7
		Avg	60.2	51.5	43.6	45.7	51.2	51.8	55.7	58.9	66.8	72.1	72.7	67.2
F9-2105	Coyote Dam (Lake Mendo.)	Max	101	75	72	69	81	81	91	82	102	106	103	104
		Min	34	32	25	26	24	27	32	32	42	44	47	38
		Avg Max	77.7	62.5	65.2	55.1	68.2	64.3	71.5	70.4	80.7	89.0	92.0	87.0
		Avg Min	45.5	38.8	32.1	34.5	29.8	33.5	36.5	40.9	48.9	50.8	51.4	44.6
		Avg	61.6	50.6	48.6	44.8	49	48.9	54.0	55.7	64.9	69.9	72.7	65.6

TABLE A-5

MONTHLY TEMPERATURES 1963-64														
		IN DEGREES FAHRENHEIT												
NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E6-2109	Coyote Reservoir	Max	93	74	68	63	72	78	90	88	104	103	100	102
		Min	32	27	24	23	25	28	28	33	40	39	41	36
		Avg Max	74.1	61.5	57.6	55.1	62.3	62.2	67.9	71.8	80.2	88.0	86.8	82.1
		Avg Min	45.5	38.2	31.3	32.4	31.1	34.0	36.7	40	46.7	48.4	48.1	44.8
		Avg	59.8	49.8	44.4	43.8	46.7	48.1	52.3	55.9	63.5	68.2	67.4	63.4
E4-2177	Crockett	Max	83	71	56	63	77	78	85	80	99	100	97	99
		Min	44	38	31	31	33	34	37	42	50	50	53	48
		Avg Max	74.0	60.5	46.5	54.6	64.0	63.1	68.1	70.1	77.6	84.5	84.1	80.4
		Avg Min	52.8	45.4	36.6	37.9	38.3	41.5	44.2	47.0	53.2	54.4	56.2	54.4
		Avg	63.4	53.0	41.6	46.3	51.2	52.3	56.2	58.6	65.4	69.5	70.2	67.4
D0-2290	Davenport	Max	72	73	77	72	72	70	74	62	69	72	68	81
		Min	46	42	39	37	38	38	39	41	45	46	48	45
		Avg Max	65.9	61.1	60.2	56.3	59.4	56.2	57.0	56.0	61.2	77.7	63.5	66.2
		Avg Min	52.4	48.7	45.6	42.8	43.3	42.5	43.3	44.8	49.3	50.1	51.7	50.4
		Avg	59.2	54.9	52.9	49.6	51.4	49.4	50.2	50.4	55.2	63.9	57.6	58.3
E3-2580	Duttons Landing	Max	82	71	57	64	79	80	88	81	94	93	91	99
		Min	38	36	30	29	30	32	34	35	43	43	49	42
		Avg Max	72.3	61.8	50.4	55.5	65.2	64.3	69.0	68.7	75.3	78.6	78.8	80.0
		Avg Min	48.7	42.0	35.1	35.6	35.4	40.0	41.1	43.2	50.2	52.0	53.5	49.9
		Avg	60.5	51.9	48.7	45.6	50.0	52.2	55.1	56	62.8	65.0	66.2	65.0
E3-2934	Fairfield Police Sta.	Max	96	73	57	65	NR	80	89	88	102	103	103	102
		Min	39	34	25	29	31	32	33	40	47	51	50	48
		Avg Max	76.8	62.0	48.1	55.9	M	66.8	72.7	73.8	81.6	88.7	89.3	86.4
		Avg Min	50.3	42.7	35.5	35.6	M	40.9	44.0	47.5	53.7	55.8	56.3	53.4
		Avg	63.6	52.4	41.8	45.8	M	53.9	58.4	60.7	67.7	72.3	72.8	69.9
D1-3238	Fremont Peak State Park	Max	90	80	83	71	82	82	86	92	102	97	94	89
		Min	42	27	24	26	26	26	28	32	35	42	36	31
		Avg Max	71.4	58.9	64.1	55.6	62.8	57.2	62.0	63.5	73.3	83.5	79.4	72.8
		Avg Min	52.4	45.8	43.5	37.2	37.3	37.7	42.7	44.9	51.8	60.8	57.6	48.2
		Avg	61.9	52.4	53.8	46.4	50.0	47.4	52.4	54.2	62.6	72.2	68.5	60.5
D1-3417	Gilroy	Max	90	75	71	66	76	80	93	92	103	103	103	105
		Min	36	30	27	24	27	28	34	31	40	42	39	42
		Avg Max	76.6	64.1	58.3	58.8	65.5	65.2	70.7	73.7	81.9	88.4	88.3	83.2
		Avg Min	49.4	41.5	31.6	32.3	30.7	36.5	39.6	43.0	47.9	50.4	51.0	47.6
		Avg	63.0	52.8	45.0	45.6	48.1	50.9	55.2	58.4	64.9	69.4	69.7	65.4
F9-3557	Graton	Max	88	72	59	65	78	79	92	84	98	104	102	106
		Min	38	35	28	31	31	32	30	33	39	41	43	38
		Avg Max	72.9	61.4	50.0	54.7	65.2	63.6	70.5	71.3	79.8	85.2	86.7	84.7
		Avg Min	49.9	43.7	38.7	38.3	36.1	38.5	37.9	42.1	48.0	49.5	50.0	47.0
		Avg	61.4	52.6	44.4	46.5	50.7	51.0	54.2	56.7	63.9	67.4	68.4	65.9
F9-3578	Graton 1 W	Max	86	69	57	63	78	78	87	81	99	99	99	101
		Min	36	33	25	28	27	27	30	33	40	40	42	38
		Avg Max	69.9	59.1	48.6	53.7	64M	63.0	69.3	70.7	79.3	85.4	85.9	82.9
		Avg Min	48.4	42.4	35.6	35.4	33M	34.7	37.6	40.9	47.2	48.1	48.7	46.7
		Avg	59.2	50.8	42.1	44.6	49M	48.9	53.5	55.8	63.3	66.8	67.3	64.8
E8-3714	Half Moon Bay 2 NNW	Max	75	68	70	69	72	73	77	64	68	72	69	84
		Min	43	41	35	35	36	33	38	37	42	46	48	46
		Avg Max	67.5	62.0	62.0	59.0	64.4	59.6	57.7	57.9	62.2	64.6	66M	66.2
		Avg Min	51.5	48.8	41.4	39.8	40.3	40.9	44.3	45.7	49.8	51.8	52M	50.9
		Avg	59.5	55.4	51.7	49.4	52.4	50.3	51.0	51.8	56.0	58.1	59M	58.6

TABLE A-5

MONTHLY TEMPERATURES 1963-64														
IN DEGREES FAHRENHEIT														
NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
F9-3875	Healdsburg	Max	97	77	60	67	82	85	93	89	105	106	105	108
		Min	42	35	29	31	31	34	34	37	44	46	47	42
		Avg Max	76.0	63.3	51.0	56.4	68.0	66.8	73.8	75.5	83.5	91.1	90.9	87.7
		Avg Min	50.8	44.4	37.0	36.8	35.6	39.8	42.8	45.0	51.2	52.1	52.9	51.4
		Avg	63.4	53.9	44.0	46.6	51.8	53.3	58.3	60.3	67.4	71.6	71.9	69.6
D1-4022	Hollister	Max	82	75	69	68	79	80	93	84	90	92	95	103
		Min	34	28	25	24	26	27	31	N	41	43	43	40
		Avg Max	75.2	64.4	60.5	59.7	66.6	65.5	69.9	70.0	74.9	80.5	82M	81.0
		Avg Min	48.1	39.4	30.5	34.4	31.2	35.1	39.8	42M	46.9	49.1	49M	M
		Avg	61.7	51.9	45.5	47.1	48.9	50.3	54.9	56M	60.9	64.8	65M	M
F9-4277	Inverness Mery	Max	NR	NR	NR	68	80	76	82	74	90	82	92	92
		Min	NR	NR	NR	32	33	32	34	38	40	40	42	40
		Avg Max	NR	NR	NR	60.0	65.6	61.2	64.7	63.8	70.8	74.4	74.8	74.6
		Avg Min	NR	NR	NR	41.0	38.3	40.4	42.1	45.4	48.8	50.9	51.2	49.8
		Avg	NR	NR	NR	50.5	52.0	50.8	53.4	54.6	59.8	62.6	63.0	62.2
E2-4500	Kentfield	Max	85	70	59	64	78	79	87	84	95	98	99	100
		Min	40	37	30	31	33	33	34	37	44	45	47	42
		Avg Max	72.1	61.4	49.7	55.3	64.6	64M	68M	69.4	76.6	83.3	83M	79.8
		Avg Min	50.2	44.6	37.5	37.7	37.3	39M	41M	44.5	50.1	51.1	52M	49.3
		Avg	61.2	53.0	43.6	46.5	51.0	52M	54M	57.0	63.4	67.2	67M	64.6
D2-4555	King City	Max	87	82	77	74	79	83	95	87	N	101	95	104
		Min	34	29	25	23	25	26	32	32	N	46	M	40
		Avg Max	78.5	68M	67M	62M	69M	68.3	73M	73.0	M	M	86.6M	84M
		Avg Min	48.7	41M	32M	35M	32M	35.7	40M	42.5	48.7	M	M	46M
		Avg	63.6	54M	50M	48M	51M	52.0	57M	57.8	M	M	M	65M
E6-4922	Lexington Reservoir	Max	90	74	68	65	71	79	86	85	102	101	100	101
		Min	36	31	27	27	29	29	31	33	39	40	40	38
		Avg Max	73.5	61.3	56.4	56.0	62.9	61.8	67.8	70.7	78.8	86.7	84.8	81.6
		Avg Min	47.0	40.9	33.3	35.5	34.4	36.1	39.1	40.7	45.8	48.9	48.7	47.3
		Avg	60.2	51.1	44.8	45.8	48.7	49.0	53.4	55.7	62.3	67.8	66.8	64.4
D3-4963	Linn Ranch	Max	93	72	72	70	71	80	89	89	105	M	M	M
		Min	37	30	24	24	26	25	32	33	44	M	M	M
		Avg Max	74.4	61.9	59.8	56.8	63.6	63.4	70.2	74.4	85.2	M	M	M
		Avg Min	49.4	40.7	29.9	32.4	31.1	33.8	39.2	43.0	50.7	M	M	M
		Avg	61.9	51.3	44.9	44.6	47.4	48.6	54.7	58.7	68.0	M	M	M
E5-4996	Livermore Sewage Treatment Plant	Max	98	74	66	63	74	80	86	86	102	102	101	100
		Min	22	30	22	22	24	26	30	34	42	45	44	36
		Avg Max	75.9	64.9	54.0	57.2	63.3	60.1	69.8	70.7	79.1	86.5	86.7	83.4
		Avg Min	44.6	38.0	31.6	32.7	30.8	36.9	37.6	42.5	49.5	52.6	51.7	47.5
		Avg	60.0	51.4	42.8	45.0	47.0	48.5	53.7	56.6	64.3	69.6	69.2	65.5
E5-4997	Livermore 2 SSW	Max	98	72	61	64	73	79	90	90	105	105	104	100
		Min	35	28	20	22	26	25	29	34	41	42	43	44
		Avg Max	75.9	62.5	50.4	55.7	62.4	63.1	70.0	72.9	79.2	88.9	88.6	83.0
		Avg Min	45.6	37.5	29.2	31.5	31.0	34.9	37.5	40.1	47.2	50.4	52.1	49.9
		Avg	60.8	50.0	39.8	43.6	46.7	49.0	53.8	56.5	63.2	69.7	70.4	66.5
E6-5123	Los Gatos	Max	85	69	69	63	71	81	89	84	100	99	98	98
		Min	40	31	30	31	31	31	35	37	45	46	47	44
		Avg Max	73.5	61.5	55.1	57.6	62.8	64.5	69.6	70.2	78.5	83.5	83.7	81.2
		Avg Min	47.8	41.2	35.0	36.2	35.0	39.5	42.1	44.9	49.9	53.6	53.4	50.3
		Avg	60.7	51.4	45.1	46.9	48.9	52.0	55.9	57.6	64.2	68.6	68.6	65.8

TABLE A-5

MONTHLY TEMPERATURES 1963-64

IN DEGREES FAHRENHEIT

NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E3-5333	Mare Island	Max	84	72	55	62	76	80	90	87	95	95	M	M
		Min	48	42	33	37	40	38	41	43	51	55	M	M
		Avg Max	72.9	60.6	47.0	54.4	63.8	65.8	70.7	73.5	78.9	82.0	M	M
		Avg Min	57.1	49.4	39.8	42.6	44.2	46.7	49.1	51.8	57.3	59.6	M	M
		Avg	65.0	55.0	43.4	48.5	54.0	56.2	59.9	62.6	68.1	70.8	M	M
E4-5377	Martinez Fire Sta.	Max	88	72	58	62	80	80	90	86	102	102	100	102
		Min	40	36	28	30	33	33	35	40	47	49	52	48
		Avg Max	73.8	61.0	47.3	54.2	64.0	64.2	69.8	72.9	79.6	86.6	86.7	82.2
		Avg Min	50.5	43.4	35.9	35.7	37.0	40.7	43.6	47.6	53.3	55.0	55.7	52.8
		Avg	62.2	52.2	41.6	45.0	50.5	52.5	56.7	60.3	66.5	70.8	71.2	67.5
D4-5795	Monterey	Max	80	76	75	64	73	75	84	69	76	84	81	95
		Min	46	42	34	36	38	37	39	42	47	48	48	48
		Avg Max	68.5	63.7	61.3	57.7	62.1	58.4	59.1	59.1	64.7	66.3	66.3	69.3
		Avg Min	53.1	48.8	44.6	42.5	43.1	42.8	46.2	46.1	50.1	51.6	52.2	51.7
		Avg	60.8	56.3	53.0	50.1	52.6	50.6	51.7	52.6	57.4	59.0	59.3	60.5
E4-5915	Mt. Diablo North Gate	Max	90	72	74	73	68	77	85	84	101	104	100	100
		Min	39	34	32	31	33	31	31	32	40	45	46	44
		Avg Max	70.8	58.7	60.2	54.4	60.3	58.8	66.3	68.3	76.4	87.9	88.9	81.5
		Avg Min	51.6	45.1	42.3	37.6	40.8	39.3	41.8	43.9	50.4	58.8	59.0	54.6
		Avg	61.2	51.9	51.3	46.0	50.6	49.1	54.1	56.1	63.4	73.4	74.0	68.1
E5-5933	Mt. Hamilton	Max	87	69	68	58	63	65	75	75	89	89	88	89
		Min	34	28	26	25	24	22	25	27	34	38	38	38
		Avg Max	64M	52M	55M	45M	52M	47M	56M	58M	67M	78M	78M	72M
		Avg Min	M	40M	42M	33M	36M	33M	38M	43M	49M	61M	62M	54M
		Avg	M	46M	49M	39M	44M	40M	47M	51M	58M	70M	70M	63M
E3-6068	Napa - Haven	Max	90	80	60	64	80	80	89	88	100	100	RE	RE
		Min	35	30	24	26	28	26	31	34	40	44	RE	RE
		Avg Max	74.5	62.8	52.7	55.4	65.1	64.7	71.7	72.2	77.1	84.6	RE	RE
		Avg Min	47.1	40.2	33.3	34.6	32.7	36.5	39.0	46.6	47.5	50.4	RE	RE
		Avg	60.8	51.5	43.0	45.0	48.9	50.6	55.4	59.4	62.3	67.5	RE	RE
E3-6074	Napa State Hospital	Max	89	72	62	66	80	85	90	85	98	101	98	104
		Min	36	33	28	28	30	29	31	33	42	46	49	42
		Avg Max	75.5	63.7	53.8	56.8	66.4	66.6	70.9	72.3	78.4	83.6	83.2	83.0
		Avg Min	49.1	42.6	34.2	36.0	35.9	36.8	40.9	43.5	49.7	52.9	53.4	49.7
		Avg	62.3	53.2	44.0	46.4	51.2	51.7	55.9	57.9	64.1	68.3	68.3	66.4
E5-6144	Newark	Max	81	70	62	61	78	76	85	76	94	92	92	94
		Min	41	39	30	30	30	29	37	40	49	52	54	50
		Avg Max	71.7	62.3	54.0	56.7	62.7	61.2	66.0	65.0	72.8	75.5	76M	76.0
		Avg Min	52.3	45.4	36.5	38.6	36.9	40.4	44.3	47.3	52.8	57.0	58M	55.8
		Avg	62.0	53.9	45.3	47.7	49.8	50.8	55.2	56.2	62.8	66.3	67M	65.9
E4-6335	Oakland WBAP	Max	76	67	61	62	72	74	78	65	83	84	83	89
		Min	46	44	35	36	41	43	39	44	51	53	55	53
		Avg Max	67.8	59.2	50.4	53.4	59.6	58.2	61.3	60.0	65.6	68.3	70.1	71.6
		Avg Min	56.1	48.8	40.3	43.3	45.0	47.4	48.7	50.4	54.6	56.1	57.8	56.6
		Avg	62.0	54.0	45.4	48.4	52.3	52.8	55.0	55.2	60.1	62.2	64.0	64.1
E7-6646	Palo Alto City Hall	Max	81	71	62	64	75	76	85	77	93	93	93	95
		Min	37	33	27	29	30	33	31	37	43	45	47	44
		Avg Max	71.1	61.9	53.2	55.9	62.9	62.3	66.8	66.7	72.9	77M	77.6	77.2
		Avg Min	48.7	42.8	34.8	36.2	35.0	40.2	41.8	45.0	50.5	55M	54.4	49.2
		Avg	59.9	52.4	44.0	46.1	49.0	51.3	54.3	55.9	61.7	66M	66.0	63.2

TABLE A-5

MONTHLY TEMPERATURES 1963-64														
IN DEGREES FAHRENHEIT														
NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E2-6826	Petaluma F. S. No. 2	Max	90	73	60	65	80	79	88	80	99	99	100	104
		Min	36	31	25	25	28	29	29	35	41	42	42	42
		Avg Max	74.6	63.0	50.9	56.5	65.9	63.9	68.1	68.7	76.2	82.4	83.6	83.0
		Avg Min	48.8	42.5	35.9	35.0	34.4	37.1	39.9	43.5	48.2	50.1	50.4	49.0
		Avg	61.7	52.8	43.4	45.8	50.2	50.5	54.0	56.1	62.2	66.3	67.0	66.0
D2-6926	Pinnacles Nat'l Mon.	Max	101	82	78	77	79	82	92	89	107	105	102	104
		Min	32	26	24	24	25	26	29	31	40	42	42	38
		Avg Max	80.7	66.0	67.6	60.4	67.8	65.4	72.8	75.3	85.6	95.5	95.1	89.2
		Avg Min	44.7	38.3	32.0	32.2	30.3	35M	37.7	40.5	46M	50.8	50.2	44.4
		Avg	62.7	52.2	49.8	46.3	49.1	50M	55.3	57.9	66M	73.2	72.7	66.8
E5-6991-05	Pleasanton Nursery	Max	96	78	61	60	74	86	90	90	106	104	103	101
		Min	33	30	25	24	26	28	32	35	40	44	47	43
		Avg Max	74.6	60.7	51.5	55.8	63.9	63.8	71	73	79.7	88.9	88.7	83.9
		Avg Min	47.5	40.5	34.2	34.7	32.0	37.2	39.9	43.6	48.9	51.5	51.6	48.3
		Avg	61	50.6	42.8	45.2	48.0	50.5	55.4	58.3	64.3	70.2	70.2	66.1
F8-7009	Point Arena	Max	72	67	73	71	72	65	60	64	82	72	76	91
		Min	37	36	33	31	30	31	33	34	45	43	44	39
		Avg Max	65.9	59.9	57.8	54.5	58.6	54.9	56.2	57.9	63.3	64.4	66.0	65.9
		Avg Min	48.6	45.0	41.7	38.7	37.7	38.2	39.9	42.7	48.0	48.9	50M	46.3
		Avg	57.3	52.5	49.8	46.6	48.2	46.6	48.1	50.3	55.7	56.7	58M	56.1
D5-7024	Point Piedras Blancas	Max	72	72	72	64	70	70	71		68	70	74	76
		Min	50	43	41	40	40	38	36	M	43	42	44	41
		Avg Max	67M	63.5	63.0	60.1	62.2	59.0	59.7	M	63.2	64.3	65.8	66.0
		Avg Min	53.9	50.2	46.5	45.5	45.4	43.7	41.8	M	45.3	45.4	48.5	47.9
		Avg	60M	56.9	54.8	52.8	53.8	51.4	50.8	M	54.3	54.9	57.2	57.0
E4-7070	Port Chicago NAD	Max	91	71	57	62	77	80	87	87	102	104	100	99
		Min	37	33	28	M	28	28	30	35	47	49	48	45
		Avg Max	74.7	61.4	47.3	55M	64.1	64.2	70.8	72.7	80.0	87.5	87.2	82.7
		Avg Min	48.4	40.8	34.7	36M	33.2	35.8	39.5	44M	51.0	53.5	53.8	50.5
		Avg	61.6	51.1	41.0	46M	48.7	50.0	55.2	58M	65.5	70.5	70.5	66.6
F9-7109	Potter Valley P.H.	Max	99	71	M	71	81	80	89	88	104	108	104	105
		Min	30	27	21	23	24	22	28	28	40	44	39	38
		Avg Max	76M	61M	M	54M	68M	M	72M	77M	M	95M	95.4	M
		Avg Min	47M	37M	M	30M	28M	M	33M	40M	M	51M	50.3	M
		Avg	60M	49M	M	42M	48M	M	53M	58M	M	73M	72.9	M
D2-7150	Priest Valley	Max	97	73	72	76	69	76	86	87	104	103	101	99
		Min	25	23	19	15	16	18	24	22	32	36	40	30
		Avg Max	74.3	61.1	61.9	55.2	61.6	60.9	68.0	73M	83.8	93.7	93.1	86.2
		Avg Min	40.3	33.1	24.5	25.4	23.8	28.1	32.0	36M	42.9	49.0	49.0	38.7
		Avg	57.3	47.1	43.2	40.3	42.7	44.5	50.0	56M	63.4	71.4	71.1	62.5
D1-7190	Quien Sabe Hay Camp	Max	93	76	74	71	71	75	88	85	101	101	95	101
		Min	24	23	18	15	14	21	20	27	32	35	39	32
		Avg Max	71.1	61.5	63.4	58.4	60.4	59.4	66.6	68.7	76.5	85.6	83.1	79.9
		Avg Min	40.3	35.5	27.2	28.8	23.8	29.8	32.6	35.8	43.7	47.3	47.3	40.8
		Avg	56.0	48.5	45.3	44.1	42.1	44.6	49.6	52.2	60.1	66.5	65.2	60.4
E7-7339	Redwood City	Max	83	71	65	65	76	79	89	86	97	98	98	99
		Min	40	35	29	31	30	32	36	39	45	45	48	45
		Avg Max	74.3	63.9	55.5	58.2	65.1	65.0	70.4	71.9	78.5	83.6	84.3	82.8
		Avg Min	50.6	44.2	36.3	38.7	36.8	40.5	42.3	45.4	50.4	52.4	53.6	49.9
		Avg	62.3	54.1	45.9	48.5	51.0	52.8	56.4	58.7	64.5	68.0	69.0	66.4

TABLE A-5

MONTHLY TEMPERATURES 1963-64														
IN DEGREES FAHRENHEIT														
NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E4-7414	Richmond	Max	78	71	63	64	78	78	87	72	83	85	84	95
		Min	44	40	33	35	37	37	38	44	50	51	54	52
		Avg Max	70.7	63.1	54.3	56.6	64.0	61.8	64.7	63.5	68.7	68.8	69.9	73.0
		Avg Min	53.9	47.5	38.9	41.1	42.2	44.1	47.5	50.3	54.2	54.7	56.8	55.8
		Avg	62.3	55.3	46.6	48.9	53.1	53.0	56.1	56.9	61.5	61.8	63.4	64.4
D4-7539-01	Roosevelt Ranch	Max	79	72	71	73	72	75	85	78	85	84	86	90
		Min	51	48	48	44	43	41	42	43	49	50	52	50
		Avg Max	69.2	62.3	63.3	60.7	63.2	59.8	63.2	63.5	69.2	73.5	73.9	70.5
		Avg Min	57.1	53.9	54.0	50.9	49.7	47.7	50.1	49.4	54.5	57.9	58.1	56.1
		Avg	63.2	58.1	58.6	55.8	56.4	53.8	56.6	56.4	61.8	65.7	66.0	63.3
E3-7643	Saint Helena	Max	97	74	65	68	80	82	91	88	104	105	105	106
		Min	37	32	26	26	27	29	30	33	42	44	45	40
		Avg Max	74.6	62.2	53.8	55.3	67.1	65.0	73.2	74.6	81.6	90.3	90.2	86.3
		Avg Min	48.8	41.3	34.2	34.4	34.0	36.4	39.2	43.2	50.0	51.8	51.9	48.9
		Avg	61.7	51.8	44.0	44.9	50.6	50.7	56.2	58.9	65.8	71.1	71.1	67.6
E4-7661	Saint Mary's College	Max	91	67	59	61	74	77	87	86	102	101	99	96
		Min	36	30	24	25	25	27	29	34	45	45	44	41
		Avg Max	71.5	58.5	48.8	53.7	63.0	61.8	68.1	68.1	77.4	83.2	82.8	79.0
		Avg Min	47.0	39.9	33.8	33.5	31.6	35.0	38.3	43.2	50.2	54.0	53.6	49.5
		Avg	59.3	49.2	41.3	43.6	47.3	48.4	53.2	55.7	63.8	68.6	68.2	64.3
D2-7668	Salinas 2 E	Max	82	79	78	71	80	78	90	71	82	86	84	97
		Min	38	34	28	27	29	30	30	40	45	47	45	37
		Avg Max	74.1	66.6	65.6	61.0	67.4	63.4	65M	64.7	70.0	71.8	72.7	74.3
		Avg Min	50.3	43.1	37.5	36.5	35.2	38.6	42M	45.6	50.3	52.0	53.1	49.4
		Avg	62.2	54.9	51.6	48.8	51.3	51.0	53M	55.2	60.2	61.9	62.9	61.9
D2-7669	Salinas FAA Airport	Max	83	78	77	67	80	80	91	72	83	87	85	98
		Min	39	36	30	28	31	32	36	40	47	50	47	46
		Avg Max	73M	65.5	64.8	59.9	66.8	63.8	64.8	65.2	70.9	71.4	72.2	73.7
		Avg Min	52M	44.4	38.1	37.8	37.4	40.3	42.9	46.9	52.5	53.8	53.9	51.5
		Avg	62M	55.0	51.5	48.9	52.1	52.1	53.9	56.1	61.7	62.6	63.1	62.6
D3-7714	San Antonio Mission	Max	97	80	75	76	75	82	90	92	108	106	105	104
		Min	31	26	22	21	23	22	28	25	38	39	39	37
		Avg Max	80.1	66.5	66M	60M	67.3	67M	73.7	78.5	88.4	98.0	97.5	91.1
		Avg Min	43.5	36.4	29M	29M	28.0	31M	34.3	36.6	44.9	49.6	47.9	43.0
		Avg	61.8	51.5	48M	44M	47.7	49M	54.0	57.6	66.7	73.8	72.7	67.1
E8-7767	San Fran. Richmond Sunset	Max	75	69	60	69	72	72	77	63	69	68	69	90
		Min	44	42	36	35	36	34	38	42	47	46	49	47
		Avg Max	61	62.8	54.2	57.1	61.5	57.8	59.3	58.3	61.9	62.1	64.8	67.3
		Avg Min	32.9	47.7	40.7	41.7	42.2	42.6	45.6	47.9	50.8	52.3	55.0	55.3
		Avg	47	55.3	47.5	49.4	51.9	50.2	52.5	53.1	56.4	57.2	59.9	61.3
E7-7769	San Francisco WBAP	Max	82	68	64	61	72	74	85	70	91	91	89	92
		Min	45	39	33	33	36	36	40	43	49	51	52	48
		Avg Max	70.4	61.9	53.3	56.3	61.6	60.6	63.4	63.7	69.7	71.6	73.1	73.2
		Avg Min	44.0	46.9	39.2	40.0	40.0	43.1	45.0	47.9	52.8	54.5	55.4	53.7
		Avg	62.2	54.4	46.3	48.2	50.8	51.9	54.2	55.8	61.3	63.1	64.3	63.5
E7-7772	San Fran. Fed. Off. Bldg.	Max	78	69	61	66	75	75	82	66	81	81	80	92
		Min	52	45	37	42	44	44	44	44	49	50	52	50
		Avg Max	68.7	61.6	53.1	56.1	62.4	58.9	59.7	58.3	63.6	64.6	65.5	69.0
		Avg Min	57.1	51.7	43.4	45.8	47.6	47.4	47.8	48.4	52.0	53.1	54.5	55.8
		Avg	62.9	56.6	48.3	51.0	55.0	53.2	53.8	53.4	57.8	58.9	60.0	62.4

TABLE A-5

MONTHLY TEMPERATURES 1963-64														
IN DEGREES FAHRENHEIT														
NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E8-7807	San Gregorio 3 SE	Max	78	M	77	68	74	74	83	65	80	83	83	89
		Min	36	M	30	29	27	28	33	32	40	40	41	39
		Avg Max	69.4	M	63.3	58.4	62.8	58.5	60.4	59.8	66.0	68.2	69.6	71M
		Avg Min	48.0	M	38.7	38.0	34.8	37.6	39.9	42.8	47.7	49.6	49.4	48M
		Avg	58.7	M	51.0	48.2	48.8	48.1	50.2	51.3	56.9	58.9	59.5	60M
E6-7821	San Jose	Max	M	M	M	65	76	80	87	80	95	94	94	98
		Min	M	M	M	34	36	35	39	41	48	48	48	46
		Avg Max	M	M	M	58.6	64.9	63.9	68.4	68.7	75.7	79.9	79.4	80M
		Avg Min	M	M	M	41.2	40.6	43.3	45.3	47.8	52.8	55.1	55.1	54M
		Avg	M	M	M	49.9	52.8	53.6	56.8	58.3	64.3	67.5	67.3	67M
E6-7824	San Jose Decid. FFS	Max	88	72	67	64	77	82	93	84	99	96	100	101
		Min	42	37	31	32	34	34	38	41	47	48	49	48
		Avg Max	75.6	64.7	57.6	59.1	66.0	66.2	72.2	70.3	79.0	82.6	83.9	83.0
		Avg Min	53.4	45.6	37.2	40.2	38.5	42.0	44.8	47.6	52.7	55.3	55.8	53.1
		Avg	64.5	55.2	47.4	49.6	52.2	54.0	58.5	59.0	65.8	69.0	69.9	68.1
E7-7864	San Mateo	Max	81	71	65	63	72	76	85	73	92	94	91	96
		Min	45	41	31	35	37	36	38	42	49	50	52	44
		Avg Max	72.2	63.7	55.9	57.6	64.1	62M	64.8	65.0	72.4	76M	76M	76.2
		Avg Min	54.4	48.1	39.9	42M	41.4	43M	45.3	48.4	56.6	57.9	58M	54.6
		Avg	63.3	55.9	47.9	50M	52.8	52M	55.1	56.7	64.5	67M	67M	65.4
E2-7880	San Rafael	Max	82	71	60	64	80	81	89	85	97	97	97	101
		Min	44	41	32	33	36	36	36	40	46	47	48	42
		Avg Max	74M	63M	52M	57M	66M	66M	70M	71.2	78M	83.4	83.4	82.5
		Avg Min	51M	48M	38M	39M	40M	41M	43M	45.7	52M	52.5	52.7	51.4
		Avg	62M	55M	45M	48M	53M	54M	56M	58.5	65M	68.0	68.1	67.0
E6-7912	Santa Clara University	Max	85	71	68	65	76	80	88	82	96	92	96	96
		Min	38	36	31	32	35	35	38	40	46	48	50	47
		Avg Max	74M	62M	56M	58.6	65.4	66M	71M	71M	77M	82M	84.5	81M
		Avg Min	50M	45M	37M	40.3	39.3	41M	43M	47M	52M	54M	57.3	53M
		Avg	62M	54M	46M	49.5	52.4	54M	57M	59M	65M	68M	70.9	67M
D0-7916	Santa Cruz	Max	83	79	80	65	77	78	91	77	81	89	85	96
		Min	37	33	28	29	30	28	34	34	41	41	42	40
		Avg Max	73.5	65.2	63.0	59.0	65.5	63.9	67.4	69.2	74.4	78.2	76.3	77.2
		Avg Min	48.3	41.7	36.0	36.4	35.3	37.0	40.4	42.7	47.3	49.1	49.7	47.1
		Avg	60.9	53.5	49.5	47.7	50.4	50.5	53.9	56.0	60.9	63.7	63.0	62.2
D2-7959-10	Santa Rita Muther	Max	78	68	75	M	M	M	M	M	M	M	M	M
		Min	40	33	31	M	M	M	M	M	M	M	M	M
		Avg Max	67.5	60.2	60.9	56.4	M	57.7	59.3	59.7	62.9	63.0	63.0	66.5
		Avg Min	48.3	40.5	36.2	34.7	M	36.8	41.9	46.4	50.2	50.7	50.9	49.5
		Avg	57.9	50.4	48.6	45.6	M	47.3	50.6	53.1	56.6	56.9	57.0	58.0
F9-7964	Smta Rosa Sewage Plant	Max	90	71	67	65	81	80	86	78	97	96	95	96
		Min	32	32	25	27	28	29	30	34	41	44	45	42
		Avg Max	71.7	61.0	51.5	55.1	64.7	62.1	68.9	68.2	76.5	78.9	78.4	76.8
		Avg Min	47.1	44.2	34.6	33.8	33.8	33.9	38.5	42.5	49.0	49.7	51.2	49.2
		Avg	59.4	52.6	43.0	44.4	49.2	48.0	53.7	55.4	62.8	64.3	64.8	63.0
F9-7965	Santa Rosa	Max	92	74	61	66	83	83	90	81	99	99	102	104
		Min	35	32	26	28	29	28	30	36	41	45	45	42
		Avg Max	74.9	63.4	51.6	55.8	66.7	65.2	70.9	71.0	78.9	84.5	86.0	83.4
		Avg Min	46.3	39.2	34.0	33.0	32.3	34.6	38.9	43.3	48.3	49.9	50.5	49.0
		Avg	60.6	51.3	42.8	44.4	49.5	49.9	54.9	57.2	63.6	67.2	68.3	66.2

TABLE A-5

MONTHLY TEMPERATURES 1963-64

IN DEGREES FAHRENHEIT

NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
D2-8338-01	Soledad CTF	Max	84	79	77	M	M	M	M	M	M	M	M	M
		Min	42	36	28	M	M	M	M	M	M	M	M	M
		Avg Max	73.1	65.4	65.2	59.7	65.6	63.1	66.2	65.7	72.2	74.5	75.0	76.0
		Avg Min	48.8	42.4	35.1	35.1	33.5	31.4	40.2	43.4	48.8	51.0	52.5	56.6
		Avg	61.0	53.9	50.2	47.8	49.6	47.3	53.2	54.6	60.5	62.8	63.8	66.3
E2-8351	Sonoma	Max	96	73	60	65	81	82	90	88	103	104	100	102
		Min	34	32	25	28	28	28	28	30	39	42	43	39
		Avg Max	76.0	62.0	51.1	55.8	66.9	67.0	73.0	74.4	81.5	88.6	88.5	86M
		Avg Min	46.5	41.5	35.3	35.4	33.9	36.2	37.9	41.0	47.1	48.6	49.1	46.5
		Avg	61.3	51.8	43.2	45.6	50.4	51.6	55.5	57.7	64.3	68.6	68.8	66M
D2-8446-01	Spreckels	Max	80	77	80	78	76	76	M	70	M	80	102	M
		Min	36	33	29	28	30	31	M	39	M	44	44	M
		Avg Max	72.0	65.3	63.5	62.9	66.9	60.4	M	63.3	M	71.8	77.6	M
		Avg Min	48.6	43.4	33.7	34.7	33.7	38.2	M	44.7	M	52.9	50.1	M
		Avg	60.3	54.4	48.6	48.8	50.3	49.3	M	54.0	M	62.4	63.8	M
D3-8849	Templeton	Max	94	77	73	75	74	M	M	90	107	106	104	101
		Min	35	29	23	22	24	M	M	32	40	39	42	36
		Avg Max	75.9	64.6	64.8	59.3	64.9	M	M	73.4	84.5	93.1	91.1	84.3
		Avg Min	48.2	38.9	29.7	31.8	30.4	M	M	41.6	48.1	50.7	51.2	44.4
		Avg	62.0	51.8	47.2	45.6	47.6	M	M	57.5	66.3	71.9	71.2	64.4
F9-9122	Ukiah	Max	101	73	69	65	82	81	92	88	105	110	106	108
		Min	35	31	27	27	27	27	32	34	43	46	48	42
		Avg Max	74.5	61.9	59.5	55.1	67.7	64.4	71.6	73.8	82.0	90.9	92.5	88.1
		Avg Min	47.6	41.4	35.6	34.2	32.0	35.5	38.7	43.1	49.8	53.9	53.7	47.2
		Avg	61.1	51.7	47.6	44.7	49.9	50.0	55.2	58.5	65.9	72.4	73.1	67.7
E4-9185	Upper San Leandro Filters	Max	80	71	62	62	76	78	86	75	90	90	90	96
		Min	43	40	32	35	36	33	37	40	46	50	51	45
		Avg Max	70.2	62.2	55.1	55.5	62.8	60.9	64.8	63.6	69.2	73.3	74.3	73.9
		Avg Min	52.2	45.9	37.6	39.7	41.1	40.3	44.0	45.5	50.6	52.5	53.9	53.0
		Avg	61.2	54.1	46.4	47.6	52.0	50.6	54.4	54.6	59.9	62.9	64.1	63.5
E3-9305	Veterans Home	Max	88	69	63	64	76	78	90	91	104	105	100	100
		Min	38	36	30	30	31	30	32	34	42	46	48	42
		Avg Max	72.7	63.0	55.0	56.1	62.5	64.3	72.6	77.5	84.8	90.2	88.0	83.4
		Avg Min	48.0	44.5	38.2	38.7	36.7	41.0	42.7	44.6	50.4	53.6	54.4	50.3
		Avg	60.4	53.8	46.6	47.4	49.6	52.6	57.6	61.1	67.6	71.9	71.2	66.8
E4-9423	Walnut Creek 2 ESE	Max	93	71	59	64	77	80	90	88	103	103	101	99
		Min	34	31	24	25	25	27	31	34	42	45	45	40
		Avg Max	74.8	61.6	49.6	55.0	64.8	65.1	70.9	72.5	79.2	87.5	88.1	82.6
		Avg Min	46.8	39.7	34.0	32.9	31.3	34.9	38.7	42.9	49.4	52.4	52.6	47.6
		Avg	60.8	50.7	41.8	44.0	48.1	50.9	54.8	57.7	64.3	70.0	70.4	65.1
D1-9473	Watsonville Water Works	Max	82	80	73	72	77	75	89	71	76	83	80	91
		Min	40	31	29	30	31	30	34	36	41	45	43	40
		Avg Max	71.5	64.0	61.6	59.4	64.8	61.7	64.2	63.3	68.2	70.0	70.3	71.6
		Avg Min	48.5	41.5	35.6	37.1	36.9	38.0	41.8	44.7	49.0	50.3	50.5	47.3
		Avg	60.0	52.8	48.6	48.3	50.4	49.9	53.0	54.0	58.6	60.2	60.4	59.5
E3-9675-41	Wild Horse Valley	Max	M	M	M	M	M	M	M	M	M	M	M	M
		Min	M	M	M	M	M	M	M	M	M	M	M	M
		Avg Max	M	M	M	M	M	M	M	M	M	M	M	M
		Avg Min	M	M	M	M	M	M	M	M	M	M	M	M
		Avg	M	M	M	M	M	M	M	M	M	M	M	M

TABLE A-5

MONTHLY TEMPERATURES 1963-64														
IN DEGREES FAHRENHEIT														
NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
F9-9770	Woodacre	Max	92	70	60	61	78	79	87	80	98	97	99	100
		Min	32	30	23	25	23	25	28	34	41	42	42	38
		Avg Max	71.8	60.1	48.8	53.5	63.7	62.2	69.6	65.9	75.1	81.6	82.4	80.7
		Avg Min	47.2	41.7	35.6	34.9	32.2	34.8	37.1	41.9	47.7	49.9	49.1	45.6
		Avg	59.5	50.9	42.2	44.2	48.0	48.5	53.4	53.9	61.4	65.8	65.8	63.2
E3-9861	Yountville Gamble	Max	91	N	66	M	M	M	M	M	M	M	M	M
		Min	41	M	23	M	M	M	M	M	M	M	M	M
		Avg Max	75.3	M	52.2	54.2	63.1	61.3	68.2	69.7	79.5	83.9	83.5	81.7
		Avg Min	48.9	M	31.8	33.8	29.7	31.4	33.2	37.3	42.6	47.0	46.1	43.0
		Avg	62.1	M	42.0	44.0	46.4	46.4	50.7	53.5	61.1	65.5	64.8	62.4
		Max												
		Min												
		Avg Max												
		Avg Min												
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TABLE A-6

INTERIM MONTHLY EVAPORATION 1963

NUMBER	STATION NAME		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
E6 0053	Alamitos Perc. Pond	Evap.										9.37	8.40	6.38
		Wind Movement										1,861	1,658	963
		Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
		Avg. Min.										NR	NR	NR
E7 1206	Burlingame	Evap.										NR	6.84	4.86
		Wind Movement										1,347	1,123	700
		Water Temp										86.5	85.0	84.2
		Avg. Max.										57.3	58.0	60.9
		Avg. Min.												
F9 2105	Coyote Dam (Lake Mendocino)	Evap.										11.10	10.56	7.45
		Wind Movement										1,878	1,586	1,306
		Water Temp										84	84	80
		Avg. Max.										53	53	52
		Avg. Min.												
E6 2109	Coyote Reservoir	Evap.										8.42	7.13	5.36
		Wind Movement										458	397	468
		Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
		Avg. Min.												
E3 2580	Duttons Landing	Evap.										9.32	8.36	6.36
		Wind Movement										3,859	3,110	2,383
		Water Temp										84.2	83.5	NR
		Avg. Max.										53.9	54.2	NR
		Avg. Min.												
D1 4022-10	Hollister Costa	Evap.										7.50	7.04	6.02
		Wind Movement										NR	NR	NR
		Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
		Avg. Min.												
E6 4922	Lexington Reservoir	Evap.										8.67	7.95	6.22
		Wind Movement										694	932	605
		Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
		Avg. Min.												
E5 4996	Livermore Sewage Plant	Evap.										11.48	10.64	7.68
		Wind Movement										2,650	2,390	1,810
		Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
		Avg. Min.												
E5 6144	Newark	Evap.										NR	NR	6.55
		Wind Movement										NR	NR	1,662
		Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
		Avg. Min.												
D2 7845-10	San Lucas Guidici	Evap.										9.72	7.58	4.50
		Wind Movement										NR	NR	NR
		Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
		Avg. Min.												

TABLE A-6

INTERIM MONTHLY EVAPORATION 1963														
NUMBER	STATION NAME		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
D2 7959-10	Santa Rita Muther	Evap.										6.10	5.17	4.17
		Wind Movement										NR	NR	NR
		Water Temp										NR	NR	NR
		Avg. Max.												
		Water Temp										NR	NR	NR
F9 7964	Santa Rosa Sewage Plant	Avg. Min.										NR	NR	NR
		Evap.										10.09	8.59	6.71
		Wind Movement										2,937	2,367	2,059
		Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
F9 7965-03	Santa Rosa Pedranzini	Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
		Water Temp										NR	NR	NR
		Avg. Min.										NR	NR	NR
		Evap.										6.90	4.79	3.74
D2 8338-01	Soledad C.T.F.	Wind Movement										NR	NR	NR
		Water Temp										NR	NR	NR
		Avg. Max.										NR	NR	NR
		Water Temp										NR	NR	NR
		Avg. Min.										NR	NR	NR
E3 9861	Yountville Gamble	Evap.										8.96	8.26	6.99
		Wind Movement										5,027	4,109	3,506
		Water Temp										78.0	77.7	77.7
		Avg. Max.										49.9	49.6	51.7
		Water Temp												
		Avg. Min.												
		Evap.										8.43	5.72	4.29
		Wind Movement										1,686	1,522	1,077
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												

TABLE A-7

MONTHLY EVAPORATION 1963-64

NUMBER	STATION NAME		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
E6 0053	Alamitos Perc. Pond	Evap.	3.85	1.90	1.09	1.71	3.36	4.59	6.68	7.24	9.11	9.81	9.18	7.20
		Wind Movement	965	1,087	619	1,070	662	1,069	1,674	1,721	1,558	1,182	1,538	1,707
		Water Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
E7 1206	Burlingame	Evap.	3.29	1.04	0.93B	0.83B	2.68	3.76	5.58	6.13	6.86	8.04	7.47	6.08
		Wind Movement	509	472	269	438	612	870	1,086	958B	898	950	932	639
		Water Temp. Avg. Max.	78.5	63.2	54.4	56.8	66.5	73.1	78.3	83.5	86.2	88.6	88.5	85.2
		Water Temp. Avg. Min.	56.0	48.3	41.1	42.6	43.1	46.6	49.3	53.0	55.6	57.7	57.5	54.6
F9 2105	Coyote Dam (Lake Mendocino)	Evap.	3.85	1.75	0.84	0.97	2.07	3.74	5.81	6.13	9.84	11.44	11.03	8.19
		Wind Movement	971	853	787	953	980	1,524	1,627	1,542	2,000	1,901	1,871	1,654
		Water Temp. Avg. Max.	69	55	57	48	55	62	70.5	73.1	79.0	84.9	85.0	77.3
		Water Temp. Avg. Min.	48	40	34	34	30	36	40.7	44.0	50.1	54.0	54.0	47.4
E6 2109	Coyote Reservoir	Evap.	3.19	1.24	0.65	1.09	2.06	2.74	4.32	5.76	7.00	8.88	7.84	5.35
		Wind Movement	396	238	89	335	393	560	585	517	412	261	646	543
		Water Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
E3 2580	Duttons Landing	Evap.	3.55	1.50	0.82	1.20	3.36	4.53	6.34	8.22B	8.43	9.73	9.37	7.56
		Wind Movement	1,995	1,719	2,022	1,618	1,766	2,483	3,071	4,202	3,950	4,001	3,853	2,907
		Water Temp. Avg. Max.	73.6	NR	NR	53.6	63.7	68.5	73.6	NR	79.7	84.0	83.1	80.4
		Water Temp. Avg. Min.	51.6	NR	NR	37.0	37.1	41.6	44.1	NR	51.9	54.6	55.0	52.6
D1 4022-10	Hollister Costa	Evap.	5.20	2.27	2.16	2.45	3.25	4.05	5.82	5.29	7.30	8.80	7.82	7.47
		Wind Movement	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
E6 4922	Lexington Reservoir	Evap.	3.64	1.48	1.24	1.41	2.56	3.77	5.33	6.07	7.01	9.25	8.58	6.60
		Wind Movement	826	1,225	568	1,143	1,003	1,166	1,051	907	679	841	1,235	1,371
		Water Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
E5 4996	Livermore Sewage Plant	Evap.	5.28	1.76	1.27	1.60	3.66	3.90	5.79	7.47	7.76	12.48	10.33	7.36
		Wind Movement	1,560	1,890	2,550	2,040	2,220	2,240	2,590	2,960	2,550	2,610	2,530	1,710
		Water Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
E5 6144	Newark	Evap.	3.88	1.77B	1.04	14.1B	2.68	4.09	5.94	6.70	7.30	10.29	9.64	8.24
		Wind Movement	1,564	1,374	1,270	1,221	1,206	2,047	2,006	2,946	2,696	3,803	3,457	3,087
		Water Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
D2 7845-10	San Lucas Guidici	Evap.	4.19	2.09	1.79	1.76	3.58	4.87	7.17	7.04	8.09	10.37	7.23	6.04
		Wind Movement	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

TABLE A-7

MONTHLY EVAPORATION 1963-64

NUMBER	STATION NAME		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
D2 7959-10	Santa Rita Muther	Evap.	3.30	2.31	1.93	1.06	4.57	2.72	4.14	4.75	5.61	5.88	5.30	4.96
		Wind Movement	1,432	1,533	1,913	946	1,584	2,243	1,942	2,323	2,063	1,897	1,072	1,053
		Water Temp												
		Avg. Max.												
		Water Temp												
F9 7964	Santa Rosa Sewage Plant	Avg. Min.												
		Evap.	3.176	1.634	.634	.99	2.78	1.585	5.995	6.187	7.821	10.138	6.625	7.116
		Wind Movement	1,834	1,789	1,207	1,714	1,698	2,592	2,910	3,119	3,238.2	3,213	2,835	2,426
		Water Temp												
		Avg. Max.												
F9 7965-03	Santa Rosa Pedranzini	Water Temp												
		Avg. Min.												
		Evap.	2.85	1.60	0.98	0.87	2.89	2.58	5.02	6.05	7.19	9.17	9.73	7.95
		Wind Movement												
		Water Temp												
D2 8338-01	Soledad C. T. F.	Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.	4.49	2.46	2.69	2.36	4.57	5.06	6.06	7.22	8.40	8.21	7.36	7.18
		Wind Movement	3,043	3,159	2,776	3,263	2,962	3,770	3,945	4,435	5,077	4,597	3,036	3,499
E3 9861	Yountville Gamble	Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.	3.28	1.04	0.89	1.18	3.44	3.51	5.60	6.31	7.35	8.55	8.32	7.32
		Wind Movement	1,046	1,043	720	1,413	1,802	1,643	1,857	1,836	1,267	1,492	1,099	1,119
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp												
		Avg. Max.												
		Water Temp												
		Avg. Min.												

APPENDIX B

SURFACE WATER FLOW

ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

Federal

United States Geological Survey

United States Bureau of Reclamation

Local

East Bay Municipal Utility District

San Francisco Water Department

City of Vallejo

INTRODUCTION

This appendix presents surface water measurement data collected and assembled by the Department of Water Resources. It contains information collected in the Central Coastal Area during the 1964 water year covering the period from October 1, 1963 through September 30, 1964.

Maximum and Minimum Tides

Along the Pacific Coast, there are usually two high and two low tides in a day. Because tides follow the moon more closely than they do the sun, the lunar or tidal day is about 50 minutes longer than the solar day. When a tide has occurred near the end of a calendar day, the corresponding tide may skip the next day and occur in the early morning of the third day. The two high and two low tides which are usually unequal are commonly designated as higher high, lower high, higher low, and lower low waters.

Table B-1 lists maximum and minimum tides at the Sacramento River at Collinsville and Suisun Bay at Benicia Arsenal, respectively. These data are obtained from graphical charts plotted by continuous water stage recorders. The values are in feet above -13.05 feet USC&GS mean sea level datum of 1929 at Collinsville and above -10.00 feet at Benicia Arsenal. The values in most cases represent higher high water and lower low water. During a calendar day in which three instead of four tides occurred, the high value represents lower high water in the case where higher high tide did not occur and the low value represents higher low water in the case where lower low tide did not occur. The maximum and minimum values at the bottom of each monthly column represent the extremes observed during that month.

At the bottom of each table the maximum gage height of record shown is measured from the same datum as the daily high and low values.

Daily Mean Discharge

Table B-2 presents mean daily discharges in Arroyo de los Coches near Milpitas and in Butano Creek near Pescadero. Each of these stream gaging stations is equipped with a continuous water stage recorder. Each has a stage discharge relationship or rating developed. The rating gives the flow or discharge in cubic feet per second (c.f.s.) for each water stage or gage height at a station. Given the rating and continuous water stage record, mean daily discharges are determined by electronic data processing methods.

The rating is developed by making streamflow measurements with a current meter at various water stages ranging from near minimum to near maximum. Normally, the rating is fairly permanent where there is a fixed channel and a fixed flow regimen at the station. The rating varies, however, where the bed of the channel is of loose shifting sand and gravel or where vegetative growth builds up in the channel changing the flow regime. Where the rating is not permanent and varies periodically, more frequent measurements of discharge are necessary to accurately determine the discharge.

The daily values listed in Table B-2 represent daily mean discharge in cubic feet per second. These values are estimated when the flow is in excess of 140 percent of the highest measurement and when the previous and following flows are reasonably representative of conditions during a short period of missing record. The mean, maximum and minimum values at the bottom of each monthly column are representative of that month and year only. The acre-feet value for each month is a total of the daily values which are converted to acre-feet for the computation. The mean discharge under "Water Year

Summary" is an average of the monthly means. The maximum and minimum discharges are absolute instantaneous extremes that occurred during the year. The total acre-feet is the sum of the monthly acre-feet values.

The streamflow data reported herein are derived through the use of mechanical, arithmetical, and empirical operations and methods. The results are affected by inherent inaccuracies in procedures and equipment. It is, therefore, necessary to establish limits of accuracy for the reported data. The following is a listing of significant figures used in reporting streamflow data:

1. Daily flows - cubic feet per second

0.0 - 9.9 Tenths

10 - 99 2 significant figures

100 - up 3 significant figures

2. Means - cubic feet per second

0.0 - 99.9 Tenths

100 - 999 3 significant figures

1000 - above 4 significant figures

Water year totals are reported to a maximum of four significant figures.

Daily Mean Gage Height

Table B-3 presents the daily mean gage height for Rector Reservoir near Yountville. These gage heights are to USC&GS datum and are indicative of the amount of water in storage.

Imports

Table B-4 presents monthly deliveries of water into the Central Coastal Area. This table indicates the water user and the source of the supply

Monthly and water year total deliveries in acre-feet, average delivery in cubic feet per second, and monthly use in percent of annual are presented herein.

Numbering System of Recording Stations

To facilitate station identification, each gaging station was assigned a six-digit code. The method used in assigning these code numbers is as follows: The State was first divided into major hydrographic areas and each of these areas was assigned an alphabetic letter which is the first symbol of the six-part code. The second symbol was obtained by dividing the major hydrographic areas into stream basins of primary importance and assigning a digit from 0-9 with 0 generally being the valley floor. The symbol indicates the stream and/or branch on which the station is located. Where a stream crosses a valley floor the third symbol indicates the river basin from which the stream originates, and the fourth symbol now designates the stream. The last three symbols designate the relative number of the station on the stream system, except in the valley floor, where the last two symbols indicate the relative number. Station numbers increase numerically proceeding upstream. When a minor tributary enters the stream system the station numbers progress up the minor tributary and then up the main stem.

The major hydrographic areas and the stream basins which are reported in this volume are as follows:

Hydrographic Area D

D0 - Santa Cruz Coast	D3 - Upper Salinas River
D1 - Pajaro-San Benito Rivers	D4 - Monterey Coast
D2 - Lower Salinas River	

Hydrographic Area E

E0 - San Francisco Bay	E4 - East Bay
E1 - Coast-Marin	E5 - Alameda Creek
E2 - Marin-Sonoma	E6 - Santa Clara Valley
E3 - Napa-Solano	E7 - Bayside-San Mateo
	E8 - Coast-San Mateo

Hydrographic Area F

F8 - Mendocino Coast
F9 - Russian River

On Plate 2 the first two symbols of the identification code are shown in each sub-area or basin with the last four symbols of the code shown at the recording station locations. All six symbols are indicated on the hydrographic area index, and on the alphabetic index to the streamflow and stage tables, and in the upper right-hand box of the table for each individual gaging station.

Table B-2

DAILY MEAN DISCHARGE
ARROYO DE LOS COCHES NEAR MILPITAS

STATION NO	WATER YEAR
E64050	1964

IN SECOND FEET													DAY
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	
1	0.0	0.0	0.2	0.1	0.1	0.0	0.1*	0.1	0.0	0.0	0.0	0.0	1
2	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	2
3	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	3
4	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	4
5	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	5
6	0.0	0.1*	0.2	0.1	0.2	0.0	0.1	0.1*	0.0	0.0	0.0	0.0	6
7	0.0	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	7
8	0.0	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.1	0.0*	0.0	0.0	8
9	0.0	0.1	0.2	0.1*	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	9
10	0.0*	0.1	0.1*	0.0	0.2	0.0	0.1	0.0	0.0*	0.0	0.0	0.0	10
11	0.0	0.1	0.1	0.0	0.2	0.0*	0.1	0.0	0.0	0.0	0.0	0.0	11
12	0.0	0.0	0.1	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	12
13	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	13
14	0.0	0.1	0.1	0.0	0.1*	0.1	0.1	0.0	0.0	0.0	0.0	0.0	14
15	0.0	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	15
16	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	16
17	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0*	17
18	0.0	0.1*	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	18
19	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	19
20	0.0	0.5	0.1*	1.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	20
21	0.0	0.2	0.1	2.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	21
22	0.0	0.2	0.1	1.9	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	22
23	0.0	0.3	0.1	0.6	0.1	0.1*	0.0	0.0	0.0	0.0	0.0	0.0	23
24	0.0	0.4	0.1	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	24
25	0.0	0.3	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	25
26	0.0	0.3	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	26
27	0.0	0.3	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0*	0.0	27
28	0.0	0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0*	0.0	0.0	28
29	0.0	0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	29
30	0.0	0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	30
31	0.0		0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	31
MEAN	0.0	0.2	0.1	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	MEAN
MAX	0.0	0.5	0.3	2.0	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	MAX
MIN.	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MIN.
CFT		9	6	18	7	4	5	1					CFT

E - Estimated

NR - No Record

* - Discharge measurement or observation

of no flow made on this day

II - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE- FEET
0.1	27	2.85	1	20	2140	0.0	1.42	10	1	0000	53

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC T & R M D B B M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM TO	ZERO ON GAGE	REF DATUM	
			CFS	GAGE HT	DATE						
32°26'35"	121°01'45"	TM+ 6S 1E	3.5E	2.71	2/14/64	2-16-57-Date	2-16-57-Date	1957	1.00	Local	

Station located 200 ft. above Calaveras Road Bridge. 0.6 miles NE of Milpitas. Tributary to Coyote Creek via Peridencia Creek. Recorder installed Sep. 16, 1953.

Table B-2

DAILY MEAN DISCHARGE

Butano Creek nr Pescadero

STATION NO.	WATER YEAR
BB 5200	1964

IN SECOND FEET													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	2.4	2.8	9.5	5.9	8.4	4.5	5.8	2.5	1.2	0.9	0.0	0.6	1
2	2.5	3.0	9.0	5.9	8.0	6.2	4.9*	2.4	1.4	1.1	0.2	0.6	2
3	2.3	3.2	8.7	5.9	7.6	4.4	4.4	3.4	1.2	1.6	0.1	0.6	3
4	2.5	5.7	8.4	5.9	7.5	4.3	4.3	3.2	1.2	2.2	0.1	0.6	4
5	3.0	15	8.1	5.9	7.5	4.2	4.3	2.7	1.0	2.2	0.1	0.7	5
6	3.4	27*	8.1	5.9	7.4	4.1	4.2	2.8*	1.0	1.9	0.1	0.8	6
7	2.6	17	7.9	7.6	7.2	4.0	4.1	2.3	1.2	1.7	0.1	0.8	7
8	2.2*	15	7.9	6.6	7.2	3.6	4.0	2.5	2.5	1.7	0.3	0.7	8
9	2.9	14	9.5	5.9	7.1	3.6	3.8	2.3	5.5	1.5*	0.3	1.0	9
10	2.9	13	8.4	5.9	7.0	3.6	3.5	2.0	2.9*	1.1	0.4	1.0	10
11	16	13	7.9	5.9	7.0	3.8	3.5	1.9	1.9	1.2	0.2	0.8	11
12	5.7	13	7.6	5.7	7.0	8.4*	3.5	1.5	1.6	1.4	0.1	0.8	12
13	4.1	13	7.4	5.9	7.1*	5.0	3.5	1.6	1.5	1.1	0.2	0.6	13
14	3.5	28	7.1	6.1	7.0	4.3	3.4	1.6	1.4	0.9	0.3	0.9	14
15	5.7	38	6.9	5.9	7.8	4.0	3.3	1.4	1.4	0.8	0.5	1.1	15
16	7.9	21	6.9	5.7	6.9	3.7	3.1	1.8	1.2	0.8	0.7	0.9	16
17	5.0	19	6.9	6.1	6.4	3.5	2.9	2.6	1.7	0.7	0.3	0.9*	17
18	4.1	18	6.9	11	5.9	3.6	2.9	1.7	1.3	0.6	0.3	0.9	18
19	3.7	65	7.1	12	5.7	3.4	2.9	1.9	1.3	0.9	0.2	0.7	19
20	3.5	34	7.4	57	5.3	3.4	2.8	1.3	1.4	0.8	0.3	0.6	20
21	3.4	24	7.1	242*	5.1	3.5	2.6	1.3	1.5	0.9	0.4	0.4	21
22	3.4	17	6.9	65*	5.0	9.1	2.6	1.6	1.0	1.1	0.5	0.6	22
23	3.7	19	6.9	34	4.9	11	2.6	1.5	1.0	0.8	0.5	0.4	23
24	3.5	18	6.9	23	4.8	9.4*	2.8	1.3	0.9	0.8	0.5	0.4	24
25	3.2	15	6.9	17	4.8	8.1	2.7	1.1	0.9	0.9	0.7	0.4	25
26	3.2	13	6.9	14	4.8	7.1	2.5	1.1	0.9	1.3	0.7	0.6	26
27	3.2	12	6.6	12	4.8	6.6	2.5	2.5	0.9	1.2	0.7*	0.6	27
28	3.0	11	6.4	11	4.3	6.1	2.5	1.8	1.5	0.6	0.5	0.8	28
29	3.0	11	6.4	9.9	4.3	5.4	2.4	1.2	1.2	0.0*	0.4	1.0	29
30	3.0	10	6.4	9.4	5.1	5.1	2.3	1.1	1.4	0.0	0.5	0.9	30
31	2.8		6.1	8.8		4.9		1.3		0.0	0.6		31
MEAN	3.9	18.3	7.5	20.3	6.3	5.2	3.4	1.9	1.5	1.1	0.4	0.7	MEAN
MAX	16.0	65.0	9.5	242.0	8.0	11.0	5.8	3.4	5.5	2.2	0.7	1.1	MAX
MIN	2.2	2.8	6.1	5.7	4.3	3.4	2.3	1.1	0.9	0.0	0.0	0.4	MIN
ACFT	241	1090	458	1250	365	321	200	118	89	65	21	43	ACFT

E - Estimated

NR - No Record

* - Discharge measurement or observation

- No flow made on this day

E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM				MINIMUM				TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	DISCHARGE	GAGE HT	MO	DAY	ACRE FEET
5.9	705	12.00	1	21	0.0	6	27	0830	4260

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T.B.R. M.D.B.B.M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		REF. DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO	
37° 13' 49"	122° 21' 51"	SW14 8S 4W	1340	16.21	1/31/63	June 62-Date	June 62-Date	1962		0.00 Local

Station located 1.7 mi. SW intersection Pescadero Road and Old Stage Road in Pescadero.
Tributary to Pescadero Creek. Recorder installed June 22, 1962.

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		338.10	361.88	361.78	370.21	370.04	369.81	368.35	365.15	361.94	357.60	352.98	1
2		338.13	361.94	361.75	370.19	370.05	369.75	368.35	365.10	361.89	357.42	352.76	2
3		338.15	361.96	361.74	370.12	370.05	369.64	368.35	365.04	361.81	357.25	352.61	3
4		338.33	361.97	361.69	370.13	370.05	369.56	368.32	364.97	361.75	357.08	352.47	4
5		338.44	361.98	361.66	370.13	370.05	369.46	368.30	364.93	361.67	356.95	352.33	5
6		338.81	361.99	361.62	370.06	370.05	369.37	368.18	364.88	361.60	356.79	352.19	6
7		338.90	362.03	361.58	370.07	370.04	369.27	368.00	364.82	361.44	356.68	352.05	7
8		338.94	362.08	361.53	370.10	370.03	369.17	367.91	364.79	361.28	356.59	351.90	8
9		338.98	362.12	361.48	370.10	370.03	369.10	367.78	364.80	361.13	356.50	351.76	9
10		339.01	362.12	361.46	370.09	370.03	369.04	367.68	364.80	360.98	356.44	351.62	10
11		339.02	362.12	361.44	370.08	370.02	369.02	367.55	364.78	360.81	356.28	351.48	11
12		339.02	362.12	361.38	370.08	370.09	369.02	367.47	364.65	360.68	356.10	351.34	12
13		339.02	362.09	361.35	370.08	370.09	369.00	367.35	364.51	360.53	355.94	351.19	13
14		339.11	362.08	361.32	370.09	370.09	368.97	367.25	364.39	360.35	355.77	351.05	14
15		339.43	362.08	361.31	370.08	370.10	368.95	367.10	364.25	360.20	355.61	350.87	15
16		339.54	362.08	361.30	370.07	370.05	368.93	366.97	364.11	360.05	355.47	350.71	16
17		339.59	362.08	361.30	370.07	370.03	368.90	366.83	363.99	359.87	355.28	350.58	17
18		339.63	362.05	361.30	370.08	369.99	368.86	366.71	363.83	359.73	355.15	350.42	18
19		339.82	362.04	361.35	370.06	369.97	368.86	366.58	363.70	359.55	354.96	350.24	19
20		360.24	362.03	362.26	370.00	369.89	368.86	366.43	363.55	359.40	354.78	350.09	20
21		360.42	362.02	366.30	369.98	369.79	368.81	366.30	363.40	359.28	354.64	349.88	21
22		360.41	362.00	369.69	370.00	369.75	368.79	366.19	363.25	359.19	354.47	349.71	22
23		360.73	361.97	370.38	369.98	369.75	368.75	366.07	363.10	359.01	354.30	349.56	23
24		361.17	361.95	370.30	369.98	369.69	368.72	365.92	362.96	358.85	354.18	349.41	24
25		361.37	361.95	370.26	369.98	369.65	368.69	365.78	362.82	358.70	354.03	349.26	25
26		361.47	361.93	370.26	369.96	369.65	368.67	365.63	362.67	358.55	353.76	349.15	26
27		361.55	362.90	370.22	369.97	369.66	368.67	365.52	362.51	358.37	353.70	349.00	27
28		361.65	362.89	370.23	369.98	369.67	368.53	365.52	362.53	358.23	353.57	348.85	28
29		361.75	362.85	370.22	369.98	369.69	368.48	365.42	362.21	358.01	353.42	348.72	29
30		361.83	362.81	370.22	369.98	369.71	368.42	365.36	362.07	357.81	353.26	348.58	30
31			361.78	370.22		369.72		365.30		357.73	353.14		31

Clock out of Order

Range: September 31 - November 1

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-23-64	0000	370.39									

E - Estimated
NR - No Record
NF - No Flow

TABLE B-4
SURFACE WATER IMPORTS TO THE CENTRAL COASTAL AREA

IMPORT	1964 WATER YEAR												TOTAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
CITY OF VALLEJO FROM CACHE SLOUGH													
Total acre-feet	988	833	753	844	601	619	448	778	1,200	1,530	1,460	1,120	11,174
Average cubic feet per second	16	14	12	14	11	10	7	13	20	25	24	19	15
Monthly quantities in percent of seasonal	7.9	7.5	6.7	7.6	5.4	5.5	4.0	7.0	10.7	13.7	13.1	10.7	
CONTRA COSTA CANAL													
Total acre-feet	5,108	3,455	3,172	3,231	2,902	3,293	3,516	4,042	6,799	8,811	10,247	8,047	62,623
Average cubic feet per second	82	58	51	52	52	53	59	65	113	142	165	134	86
Monthly quantities in percent of seasonal	8.2	5.5	5.1	5.2	4.6	5.3	5.6	6.5	10.9	14.1	16.4	12.8	
HETCH HETCH AQUEDUCT													
Total acre-feet	10,255	7,476	3,457	12,319	13,961	15,981	15,324	16,121	15,560	16,185	16,236	15,713	158,588
Average cubic feet per second	165	125	56	199	249	258	255	260	259	261	262	262	217
Monthly quantities in percent of seasonal	6.5	4.7	2.2	7.8	8.8	10.1	9.7	10.2	9.8	10.2	10.2	9.9	
MOSELONE RIVER AQUEDUCT													
Total acre-feet	16,737	14,865	15,994	16,292	14,833	16,269	15,800	17,985	17,614	18,125	18,043	17,402	199,959
Average cubic feet per second	270	248	258	263	265	262	263	290	294	292	291	290	274
Monthly quantities in percent of seasonal	8.3	7.1	7.9	8.0	8.0	8.0	8.0	8.8	8.9	8.9	8.9	8.8	
POTTER VALLEY POWERHOUSE FROM EEL RIVER													
Total acre-feet	17,540	18,480	18,530	18,480	16,820	16,170	17,900	18,190	13,020	12,560	13,300	12,360	193,350
Average cubic feet per second	283	308	299	298	300	261	298	293	217	202	215	206	265
Monthly quantities in percent of seasonal	9.1	9.6	9.6	9.6	8.7	8.4	9.3	9.4	6.7	6.5	6.9	6.4	
PUTAH SOUTH CANAL *													
Total acre-feet	3,973	173	119	228	254	3,453	13,162	25,801	21,777	29,702	25,224	17,330	141,196
Average cubic feet per second	65	3	2	4	4	56	221	420	366	483	410	291	194
Monthly quantities in percent of seasonal	2.8	0.1	0.1	0.2	0.2	2.4	9.3	18.3	15.4	21.0	17.9	12.3	
SOUTH BAY AQUEDUCT													
Total acre-feet	2,301	487	382	1,277	1,040	1,315	621	2,808	2,986	2,754	2,348	2,537	20,856
Average cubic feet per second	37	8	6	21	19	21	10	45	50	44	38	42	29
Monthly quantities in percent of seasonal	9.6	2.3	1.8	6.1	5.0	6.3	3.0	13.5	14.3	13.2	11.3	12.2	

* A portion of this water is delivered to the Central Coastal Area by the Solano Irrigation District.

* A portion of this water is delivered to the Central Coastal Area by the Solano Irrigation District.

APPENDIX C

GROUND WATER MEASUREMENTS



ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

Federal

United States Geological Survey

Local

Alameda County Flood Control and Water Conservation District	San Benito County
Alameda County Water District	San Jose Water Works
Campbell Water Company	San Luis Obispo County Flood Control and Water Conservation District
Cupertino, City of	Santa Clara, City of
Gilroy, City of	Santa Clara Valley Water Conservation District
Monterey County Flood Control and Water Conservation District	Santa Cruz County
Mountain View, City of	Solano County
Napa County	South Santa Clara Valley Water Conservation District
North Los Altos Water Company	Stanford University
Pacheco Pass Water District	Sunnyvale, City of
Palo Alto, City of	Watsonville, City of

INTRODUCTION

This appendix includes a figure and three tables. Figure C-1, "Fluctuations of Water Levels in Wells", presents hydrographs of 21 selected wells in 19 selected basins or areas. Table C-1, "Ground Water Level Conditions in the Central Coastal Area, Spring 1964", presents average depths to ground waters and average changes by basin and region from the spring of 1963 to the spring of 1964. Table C-2, "Description of Selected Wells", provides a description of 204 wells for which ground water level data are presented in Table C-3, "Ground Water Levels at Wells". A description of the items in Tables C-2 and C-3 follows.

DESCRIPTION OF SELECTED WELLS

Table C-2, "Description of Selected Wells", is arranged in region, basin, and well number order. The water pollution control board regions used in this report and shown on Plate 3, "Ground Water Basins or Units in the Central Coastal Area", are geographic areas defined in Section 13040 of the Water Code. Regions, ground water basins or units and subareas are listed by a numbering system as follows:

	1	-	18	.	01
Region (North Coastal Region)	_____	_____	_____	_____	_____
Hydrographic Unit (Santa Rosa Valley)	_____	_____	_____	_____	_____
Subarea (Santa Rosa Area)	_____	_____	_____	_____	_____

State Well Number

The state well numbering system used in this report is based on the township, range, and section subdivision of the Public Land Survey. It is the

system used in all ground water investigations made by the Department of Water Resources. In this report, the number of a well, assigned in accordance with this system, is referred to as the State Well Number. Under the system each section is divided into 40-acre tracts lettered as follows:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Wells are numbered within each 40-acre tract according to the chronological sequence in which they have been assigned State Well Numbers. For example, a well which has the number 16N/12W-17K1,M would be in Township 16 North, Range 12 West, Section 17, Mount Diablo Base and Meridian and would be further designated as the first well assigned a State Well Number in Tract K.

Agency Well Number

The agency well number is the number assigned to a well by any agency other than the Department of Water Resources in accordance with the numbering system used by that agency. Agencies that use the state well numbering system normally coordinate assignment of well numbers with the Department. These numbers, when common, are not shown in the "Agency Well Number" column; when different, the last five digits are shown in the "Agency Well Number" column.

Agency Supplying Data

Each number in this column is the code number for a cooperating agency. The agency code consists of a five digit number, the first of which

is a region number. Thus, 32100 refers to Agency 2100 in Region 3. Because of the limitations of punch-card space, the agency code has been shown as a four-digit number without the region number. Therefore, the four-digit agency code should always be referred to the region in which the well is located.

The first digit of the four-digit agency code, as listed below, designates the type of well numbering system used by the agency.

<u>Code</u>	<u>Well Numbering System</u>
1	Location numbers
2	Monterey County Flood Control and Water Conservation District or Santa Clara Valley Water Conservation District
3	Serial numbers
4	Local numbers
5	State or U. S. Geological Survey
6	U. S. Bureau of Reclamation
7	South San Joaquin Irrigation District

The last three digits of the agency code, as listed below, are numbers that designate, within specified serial limits, the type of agency from which the data were obtained.

<u>Code</u>	<u>Type of Agency</u>
000-049	Federal
050-099	State
100-199	County
200-399	Municipal
400-699	District - Water, Irrigation, Conservation, etc.
700-999	Private

The agencies and code numbers assigned to them in each of the regions are listed in the following tabulation:

Agency Code	Agency
<u>North Coastal Region</u>	
5000	U. S. Geological Survey
5050	Department of Water Resources
<u>San Francisco Bay Region</u>	
2400	Santa Clara Valley Water Conservation District
5000	U. S. Geological Survey
5050	Department of Water Resources
5100	Alameda County Flood Control and Water Conservation District
5101	Napa County
5109	Solano County
5401	Alameda County Water District
<u>Central Coastal Region</u>	
2100 and 5100 <u>1/</u>	Monterey County Flood Control and Water Conservation District
2400	Santa Clara Valley Water Conservation District
5050	Department of Water Resources
5101	San Benito County
5102	Santa Cruz County
5400	South Santa Clara Valley Water Conservation District

1/ In the Paso Robles subbasin of Salinas Valley (3-4.06), this agency number refers to the San Luis Obispo County Flood Control and Water Conservation District.

Well Use

The well use is indicated as follows:

<u>Code</u>	<u>Well Use</u>
1	Domestic
2	Irrigation
3	Municipal
4	Industrial
5	Injection
6	Drainage
7	Domestic and Irrigation
8	Test
9	Stock
0	Unused

Well Depth in Feet

Well depths shown were reported by the owner, obtained from a driller's log, or measured at the time of the well canvass.

Data Available

Under this heading, code numbers, as listed below, indicate the type of data that are available with respect to well logs, water analyses, and production records.

<u>Data</u>	<u>Code</u>
Log record	
Log	1
Confidential log (Sec. 7076, Water Code)	2
Water Analyses	
Mineral	1

<u>Data</u>	<u>Code</u>
Water Analyses	
Sanitary	2
Heavy Metals	3
Mineral and Sanitary	4
Production record	
Available	1
Pump test available	2

Record Begins and Record Ends

The last two digits of the year the record began or ended are shown.

GROUND WATER LEVELS AT WELLS

Table C-3, "Ground Water Levels at Wells", is arranged in region, basin, well number and date order. It includes measurements of depths to water in wells made from July 1, 1963, through June 30, 1964. Table headings discussed below are only those that were not discussed under "Description of Selected Wells".

Ground Surface Elevation in Feet

The numbers in this column give the elevation in feet of the ground surface from which depth to the water surface in the well is reported. The datum used is mean sea level, USC&GS datum, 1929. Elevations of ground surface are usually taken from topographic maps and the accuracy is controlled by topographic standards.

Date

The date shown in the column is the date on which the depth measurement, shown in the next column, was made. If the day of the month is unknown, it is indicated by 00.

Ground Surface to Water Surface in Feet

This is the measured depth in feet from the ground surface to the water surface in the well. Certain of the depth measurements in the column may be followed with an asterisk superscript to indicate a questionable measurement. Depth to ground water measurements may be questionable for such reasons as (a) well being pumped while undergoing measurement, (b) nearby pump operating, (c) casing leaking or wet, (d) well pumped recently, (e) air gauge measurement, or (f) recharge operation at well or nearby. The specific reason for any asterisk or any given measurement may be obtained from the Department of Water Resources.

Other symbols used are:

Measurement discontinued	#
Well destroyed	@
No measurement for other reasons	□

Water Surface Elevation in Feet

This is the elevation in feet of the water surface in the well based on mean sea level, USC&GS datum, 1929. It was derived by subtraction of the depth measurement from the ground surface elevation. Negative values indicate elevations below datum.

The words FLOW and DRY are shown in this column to indicate a flowing or dry well respectively.

Agency Supplying Data

Each number in this column is the code number for the agency from which the water level data were obtained.

TABLE C-1
GROUND WATER LEVEL CONDITIONS
IN THE CENTRAL COASTAL AREA
SPRING 1964

Ground Water Basin or Unit	Basin Number	Average Change in Ground Water Level $\frac{1}{2}$: Spring 1962 to Spring 1964 (in feet)	Average Depth to Ground Water : Spring 1964 (in feet)
Region 1			
Potter Valley	1-14.00	-0.7	7.3
Ukiah Valley	1-15.00	-1.5	7.2
Sanel Valley	1-16.00	-3.0	8.3
Alexander Valley	1-17.00	-4.4	8.9
Santa Rosa Valley	1-18.00		
Santa Rosa Area	1-18.01	-1.0	14.0
Healdsburg Area	1-18.02	-3.5	16.0
Lower Russian River Valley	1-98.00	-4.2	13.6
Region 1 Averages: $\frac{2}{1}$		-2.0	11.6
Region 2			
Petaluma Valley	2-1.00	-0.2	23.4
Napa-Sonoma Valley	2-2.00		
Napa Valley	2-2.01	+0.6	11.4
Sonoma Valley	2-2.02	-2.3	18.8
Suisun-Fairfield Valley	2-3.00	-2.1	8.9
Ygnacio Valley	2-6.00	-2.3	17.4
Santa Clara Valley	2-9.00		
East Bay Area	2-9.01	-0.7	60.0
South Bay Area	2-9.02	+6.9	116.3
Livermore Valley	2-10.00	-2.5	66.0
Half Moon Bay Terrace	2-22.00	-2.2	20.9
San Gregorio Valley	2-24.00	-1.3	10.4
Pescadero Valley	2-26.00	-2.1	8.2
Region 2 Averages: $\frac{2}{1}$		+0.9	52.4
Region 3			
Soquel Valley	3-1.00	+1.5	64.1
Pajaro Valley	3-2.00	-4.1	64.8
Gilroy-Hollister Valley	3-3.00		
South Santa Clara County	3-3.01	+8.0	39.3
San Benito County	3-3.02	-3.4	80.3
Salinas Valley	3-4.00	-4.4	59.6
Carmel Valley	3-7.00	-2.3	18.6
West Santa Cruz Terrace	3-26.00	No measurements in 1963	30.8
Region 3 Averages: $\frac{2}{1}$		-3.7	60.5
Central Coastal Area Averages: $\frac{3}{1}$		-1.9	52.5

$\frac{1}{2}$ + indicates rise in water level.
- indicates decline in water level.

$\frac{2}{1}$ Region Averages = $\frac{\sum (\text{basin average} \times \text{basin area})}{\sum \text{basin areas}}$

$\frac{3}{1}$ Central Coastal Area Averages = $\frac{\sum (\text{region average} \times \text{region area})}{\sum \text{region areas}}$

TABLE C-2
DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE			RECORD ENDS
					LOG	WATER ANAL.	PROD. REC.	

STATE WELL NUMBER	AGENCY WELL NUMBER	SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE			RECORD ENDS
					LOG	WATER ANAL.	PROD. REC.	

NORTH COASTAL REGION

POTTER VALLEY

1-14.00

17N/11W-18J01 M

5000 1

35

51

17N/11W-32J01 M

5000 1

12

51

UKIAH VALLEY

1-15.00

15N/12W-08L01 M

5000 1

62

51

15N/12W-21M01 M

5000 7

46

51 63

15N/12W-35M01 M

5000 2

190

51

HOPLAND VALLEY

1-16.00

13N/11W-18E01 M

5000 7

52

53

13N/11W-19P01 M

5000 2

44

53

13N/11W-20G01 M

5000 1

135

53

ALEXANDER VALLEY

1-17.00

10N/09W-18B01 M

5000 2

180

50

10N/09W-26L02 M

5000 1

40

50

10N/09W-33C01 M 33B01

5000 1

20

50

11N/10W-08P01 M

5000 1

30

51

11N/10W-17P02 M

5000 2

36

53

11N/10W-19F02 M

5000 1

334

52

SANTA ROSA VALLEY

1-18.00

SANTA ROSA AREA

1-18.01

6N/08W-07P02 M

5000 7

120

45

6N/08W-13R01 M

5000 1

250

42

7N/07W-06R01 M

5050 7

193

51

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	WATER ANAL.	PROD. REC.	RECORD BEGINS ENDS
SAN FRANCISCO BAY REGION								
PETALUMA VALLEY								
				2-01.00				
3N/06W-01001 M		5050 1	225				50	
5N/07W-20802 M		5000 9	158				53	
5N/07W-21401 M		5000 1	92				59	
5N/07W-26801 M		5000 0	428				50	
5N/07W-35K01 M		5050 2	78				49	
YAPA-SONOMA VALLEY								
				2-02.00				
NAPA VALLEY								
				2-02.01				
5N/04W-11M01 M		5000 1	59	1			50	
6N/04W-17A01 M		5000 0	250	1			49	
7N/05W-09001 M		5101 2	393	1			49	
7N/05W-09002 M	16802	5000 0	232				49	
7N/05W-09003 M		5101 1	25				49	
7N/05W-23002 M		5101 2	129				49	
8N/06W-10001 M		5000 9	184	1			49	
SONOMA VALLEY								
				2-02.02				
5N/05W-17C01 M		5000 1	70				50	
5N/05W-28N01 M		5050 2	130	1			46	
5N/05W-29N01 M		5000 2	100				51	
SUITSUN-FAIRFIELD VALLEY								
				2-03.00				
4N/02W-06A01 M		5109 0	39				20	
4N/02W-09A01 M		5109 0	37				48	
4N/03W-01001 M		5109 1	67				18	
5N/01E-36A01 M		5109 9	38				29	

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	WATER ANAL.	PROD. REC.	RECORD BEGINS ENDS
SUITSUN-FAIRFIELD VALLEY								
				2-03.00				
5N/01W-07E01 M		5109 9	33				48	
5N/01W-28P01 M		5109 1	40				49	
5N/02W-17D02 M		5109 2	70				48	
5N/02W-27J02 M		5000 0	60				49	
5N/02W-29R01 M		5109 2	120				49	
5N/02W-30J01 M		5000 2	220				49	
5N/03W-26F02 M		5109 1	282				18	
YGNACIO VALLEY								
				2-06.00				
1N/01W-07K01 M		5050 1					58	
1N/02W-11M01 M		5050 1	81	2			58	
2N/02W-27R01 M		5050 1	131				58	
2N/02W-36E01 M		5050 1	40				58	
SANTA CLARA VALLEY								
				2-09.00				
SOUTH ALAMEDA COUNTY UPR AQUIFER								
				2-09.01				
3S/02W-08R05 M		5100 1	85				50	
3S/03W-24Q02 M		5100 9	80				49	
4S/01W-18G01 M		5401 4	160				58	
4S/01W-22P05 M		5100 2	180				48	
4S/01W-29C04 M		5401 0	145				50	
4S/02W-24Q02 M		5100 2					49	
5S/01W-04F01 M		5401 0	97				57	
5S/01W-09Q01 M		5100 9	60				50	

TABLE C-2
DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE	PROD REC	RECORD ENDS
					LOG WATER ANAL		

SOUTH ALAMEDA COUNTY LWR AQUIFER

2-09.01

2S/03W-36R01 M	5100 2	601	59
3S/02W-19A02 M	5050 0	218	50
3S/03W-24J01 M	5100 7	511	49
4S/02W-02001 M	5100 2	475	50
4S/02W-35R02 M	5401 7	224 2	58
4S/02W-36K01 M	5401 0	241	49
5S/01W-09M01 M	5100 2	297 1	49

NORTH SANTA CLARA COUNTY

2-09.02

6S/01E-07E01 M 59	2400 0	525	36
6S/01E-21R01 M 342A	2400 2	560 2	51
6S/01E-23P02 M 127	2400 0	295	36
6S/01E-30M01 M 84	2400 7	250	30
6S/01W-29E01 M	5000 2	425	58
6S/02W-16R01 M 5	2400 2		36
6S/02W-25C01 M 30	2400 1	500	30
6S/02W-35C01 M 20	2400 2	480	30
7S/01E-01K01 M 180A	2400 7	400	36
7S/01E-08L01 M 274	2400	235	36
7S/01E-09D02 M 120	2400 3		36
7S/01E-16C05 M	5000 3	908	58
7S/01E-31A02 M 148	2400 2		36
7S/02E-07P01 M 403	2400 3	525	57
7S/02E-17H01 M 304	2400	400	31

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE	PROD REC	RECORD ENDS
					LOG WATER ANAL		

NORTH SANTA CLARA COUNTY

2-09.02

7S/01W-35C01 M 117	2400 3	438	36
7S/02W-03C01 M 23A	2400 2	800	36
7S/02W-04B01 M 13	2400 2	450	36
7S/02W-22A01 M 37	2400 2	620	36
8S/01E-07H02 M 166A	2400	350	54
8S/01E-13H01 M 257	2400 7	110	36
8S/02E-20F03 M 297	2400		40
8S/02E-22D01 M 233	2400 7		36
8S/01W-15B01 M 129	2400	64	36
9S/02E-01J01 M 298B	2400 7	135	36
9S/02E-01M01 M 279	2400	114	37

LIVERMORE VALLEY

2-10.00

2S/02E-25N01 M	5100		48
2S/01W-26C01 M	5100 2	360	48
3S/01E-11H01 M	5100 7	303	49
3S/02E-02R01 M	5100 2	437 1	48
3S/02E-10H01 M	5100 2	376	48

HALF MOON BAY TERRACE

2-22.00

5S/05W-20L01 M	5050 0	69	53
5S/05W-29M01 M	5050 2	82	53
6S/05W-08B01 M	5050 2	85	53

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	DATA AVAILABLE	PROD REC	RECORD RECORDS	ENDS
						WATER ANAL.			

SAN GREGORIO VALLEY

2-24.00

75/05W-13E01 M	5050 0	45	56						
75/05W-15C01 M	5050 2	85	56						
75/05W-15E01 M	5050 7		53						
75/05W-15E02 M	5050 1		53						
75/05W-15H02 M	5050 1		60						
PISCADERO VALLEY									
85/05W-09H01 M	5050 2		53						
85/05W-11M01 M	5050 1	36	53						

CENTRAL COASTAL REGION

SOQUEL VALLEY

3-01.00

115/01W-09L01 M	5050 0		48						
115/01W-15H01 M	5050 0		48						
PAJARO VALLEY									
125/01E-24G01 M	5050 2	200	47						
125/02E-16J01 M	5050 2		47						
125/02E-31K01 M	5050 2	219	47						
125/02E-31K01 M	5100 2	219	47						
135/02E-05B01 M	5050 0	225	56						

GILROY-HOLLISTER VALLEY

3-03.00

SOUTH SANTA CLARA COUNTY

3-03.01

95/03E-27C02 M 374	2400 7	300	43						
95/03E-29B01 M	5050 0	170	46						
105/03E-34L01 M	5050 7	1	48						
105/04E-18G02 M	5050 7	184	48						
105/04E-35E01 M	5050 2	447	48						
115/03E-01B01 M	5400 2		57						

SAN BENITO COUNTY

3-03.02

115/05E-13D01 M	5050 2	125	2	37					
125/04E-20C01 M	5101 2	736	1	49					
125/05E-33A01 M	5050 2	150	24						
135/05E-11001 M	5101 0	44	24						

TABLE C-2
DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	MATER ANAL.	DATA AVAILABLE	PROO REC.	RECORD BEGIN	ENDS
SALINAS VALLEY										
PRESSURE AREA 180 FOOT AQUIFER										
3-04.00										
3-04.01										
14S/02E-03C01	M 2B 001	2100 2							31	
14S/02E-15L01	M 2C 025A	2100 2	176						16	
15S/02E-01001	M 2D 023	2100 7	196 1						31	
15S/03E-16M01	M 30 040	2100 2							31	
15S/04E-33A01	M 4D 056	2100 2	279 1						31	
16S/04E-11D01	M 4E 030D	2100 1							31	
PRESSURE AREA 400 FOOT AQUIFER										
3-04.01										
13S/02E-31001	M 1B 011A	2100 2	500 1						31	
14S/03E-18J01	M 2C 119	2100 2	513 1						31	
EAST SIDE AREA										
3-04.02										
16S/05E-17R01	M 5E 026	2100 2	299						16	
ARROYO SECO CONE										
3-04.04										
18S/06E-15M01	M 7G 029	2100 2	288 1						31	
19S/06E-11C01	M 7H 036	2100 2	320						44	
UPPER VALLEY AREA										
3-04.05										
19S/07E-10P01	M 8H 031	2100 2	245						31	
20S/08E-05R01	M 9I 004	2100 2	372						16	
21S/09E-06K01	M 10J 001	2100 2							16	
21S/10E-32M01	M 11K 002	2100 2							31	
22S/10E-16K01	M 12K 003	2100 2							31	

3-04.06

PASO ROBLES

24S/10E-11C01	M	5100								
24S/11E-25M01	M	5100								
24S/11E-33R01	M	5100								
24S/11E-35J01	M	5100								
24S/12E-17M01	M	5100								
24S/15E-33C01	M	5100								
25S/11E-35G01	M	5100								
25S/12E-17J01	M	5100								
25S/12E-17R01	M	5100								
25S/12E-26K01	M	5100								
25S/13E-11E01	M	5100								
25S/16E-17L01	M	5100								
25S/16E-30M01	M	5100								
26S/12E-04N01	M	5100								
26S/12E-26E01	M	5100								
26S/12E-35M01	M	5100								
26S/13E-10001	M	5100								
26S/13E-34B01	M	5100								
26S/14E-16L01	M	5100								
26S/14E-35D01	M	5100								
26S/15E-02B01	M	5100								
26S/15E-28Q02	M	5100								
26S/15E-29N01	M	5100								
27S/12E-21N01	M	5100								

DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	DATA AVAILABLE	PROD REC.	RECORD BEGINS	RECORD ENDS
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PASO ROBLES 3-04.06

27S/13E-24N01 M 5100

27S/13E-32B01 M 5100

27S/15E-10R02 M 5100

27S/15E-13A01 M 5100

27S/16E-21E02 M 5100

28S/12E-10G01 M 5100

28S/12E-10R02 M 5100

28S/12E-13N01 M 5100

28S/12E-14G01 M 5100

28S/13E-04K01 M 5100

28S/13E-04K02 M 5100

28S/14E-07E01 M 5100

28S/16E-23M01 M 5100

29S/13E-05F03 M 5100

29S/13E-05K02 M 5100

29S/13E-06A01 M 5100

29S/13E-19H01 M 5100

CARMEL VALLEY 3-07.00

16S/01E-25B01 M 5100 7 52

WEST SANTA CRUZ TERRACE 3-26.00

11S/02W-22K01 M 5050 2 54

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	DATA AVAILABLE	PROD REC.	RECORD BEGINS	RECORD ENDS
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TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
POTTER VALLEY					
			1-14.00		
17N/11W-18J01 M	955.0	7-09-63 8-19-63 9-17-63 10-23-63 11-20-63 12-19-63 1-19-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	.5 .6 .3 .4 .9 .9 □ □ □ □ □ □ □	954.5 954.4 954.7 955.4 955.9 955.9 954.1 954.1 953.9 954.7 953.1 893.1 892.2 892.4 893.2 894.6 893.4 893.5 892.8 892.8 893.0 891.9 890.8 890.9	5000
UKIAH VALLEY					
			1-15.00		
17N/11W-32J01 M	895.0	7-09-63 8-19-63 9-17-63 10-23-63 11-20-63 12-19-63 1-15-64 2-25-64 3-17-64 4-13-64 5-12-64 6-16-64	1.9 2.8 2.6 1.8 1.4 1.6 1.5 1.5 2.2 2.0 3.1 4.2 4.1	893.1 892.2 892.4 893.2 894.6 893.4 893.5 892.8 892.8 893.0 891.9 890.8 890.9	5000
NORTH COASTAL REGION					
UKIAH VALLEY					
			1-15.00		
15N/12W-21M01 M	590.0	10-22-63	□		5000
15N/12W-35M01 M	600.0	7-09-63 8-13-63 9-16-63 10-22-63 11-14-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	□ 5.4 5.8 □ □ □ 7.4 5.3 5.4 6.0 6.9 6.6	594.6 594.2 595.1 592.6 594.7 594.6 594.0 593.1 593.4	5000
HOPLAND VALLEY					
			1-16.00		
13N/11W-18E01 M	490.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	12.3 □ 12.2 12.0 10.8 10.7 12.8 11.0 10.9 □ □ 12.6*	477.7 477.8 478.0 479.2 479.3 477.2 479.0 479.1 477.4	5000
NORTH COASTAL REGION					
UKIAH VALLEY					
			1-15.00		
13N/11W-19P01 M	488.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	12.6 15.5 17.7 17.1 10.8 11.3 9.9 9.7 10.4 11.4 13.9	475.4 472.5 470.3 470.9 477.2 476.7 476.5 478.1 478.3 476.6 474.1	5000
NORTH COASTAL REGION					
UKIAH VALLEY					
			1-15.00		
15N/12W-21M01 M	590.0	10-22-63	□		5000
15N/12W-35M01 M	600.0	7-09-63 8-13-63 9-16-63 10-22-63 11-14-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	□ 5.4 5.8 □ □ □ 7.4 5.3 5.4 6.0 6.9 6.6	594.6 594.2 595.1 592.6 594.7 594.6 594.0 593.1 593.4	5000
HOPLAND VALLEY					
			1-16.00		
13N/11W-18E01 M	490.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	12.3 □ 12.2 12.0 10.8 10.7 12.8 11.0 10.9 □ □ 12.6*	477.7 477.8 478.0 479.2 479.3 477.2 479.0 479.1 477.4	5000
NORTH COASTAL REGION					
UKIAH VALLEY					
			1-15.00		
13N/11W-19P01 M	488.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	12.6 15.5 17.7 17.1 10.8 11.3 9.9 9.7 10.4 11.4 13.9	475.4 472.5 470.3 470.9 477.2 476.7 476.5 478.1 478.3 476.6 474.1	5000
NORTH COASTAL REGION					
UKIAH VALLEY					
			1-15.00		
15N/12W-21M01 M	590.0	10-22-63	□		5000
15N/12W-35M01 M	600.0	7-09-63 8-13-63 9-16-63 10-22-63 11-14-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	□ 5.4 5.8 □ □ □ 7.4 5.3 5.4 6.0 6.9 6.6	594.6 594.2 595.1 592.6 594.7 594.6 594.0 593.1 593.4	5000
HOPLAND VALLEY					
			1-16.00		
13N/11W-18E01 M	490.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	12.3 □ 12.2 12.0 10.8 10.7 12.8 11.0 10.9 □ □ 12.6*	477.7 477.8 478.0 479.2 479.3 477.2 479.0 479.1 477.4	5000

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
HOPLAND VALLEY					
13N/11W-20G01 M CONT.	515.0	9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	11.9 10.7 5.0 4.5 4.4 4.2 4.3 4.5 4.8 7.4	503.1 504.3 510.0 510.5 510.6 510.8 510.7 510.5 510.2 507.6	5000
ALEXANDER VALLEY					
10N/09W-18B01 M	230.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	11.7 12.5 17.3 17.3 18.0 18.9 18.9 17.1 18.0 18.9 18.9 18.6	210.2 210.5 215.3 215.7 215.0 215.1 215.9 216.0 216.0 216.1 216.4	5000
10N/09W-26L02 M	205.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	7.9 12.2 14.1 15.6 8.7 3.6 3.5 2.5 2.3 3.3 4.2 10.8	197.1 192.8 190.9 189.4 196.3 201.4 201.5 202.5 202.7 201.7 200.8 194.2	5000
10N/09W-33C01 M	180.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	8.2 9.2 7.8 8.3 5.5 5.5 8.2 8.2 8.2 8.2 8.2 8.2	170.8 170.8 172.2 171.7 174.5 174.5 174.5 174.5 174.5 174.5 174.5 174.5	5000

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
ALEXANDER VALLEY					
10N/09W-33C01 M CONT.	180.0	1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	6.5 6.0 6.1 3.0 7.9 8.4	173.5 174.0 173.9 177.0 172.1 171.6	5000
11N/10W-08P01 M	305.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	12.6 12.6 12.6 12.0 11.0 7.8 11.1 10.0 10.8 11.4 12.8 12.7	292.4 293.0 294.0 297.2 293.9 295.0 294.2 293.6 292.2 292.3	5000
11N/10W-17P02 M	292.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	10.6 10.1 10.1 10.9 10.9 8.7 9.0 8.5 8.6 9.4 10.5	281.4 281.9 281.3 283.3 281.1 283.0 283.7 283.2 282.6 281.5	5000
11N/10W-19F02 M	346.0	7-09-63 8-12-63 9-16-63 10-22-63 11-19-63 12-19-63 1-15-64 2-25-64 3-17-64 4-14-64 5-12-64 6-16-64	4.1 8.3 10.2 10.1 3.7 3.2 3.3 4.0 3.8 4.3 5.3 6.8	341.9 337.7 335.8 335.9 342.3 342.8 342.7 342.0 342.2 341.7 340.7 339.2	5000

TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR. TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
SANTA ROSA VALLEY					
SANTA ROSA AREA					
1-18-00					
1-18-01	95.0	7-09-63	19.1	75.9	5000
		8-12-63	29.4	65.6	
		9-16-63	24.0	71.0	
		10-22-63	□		
		11-18-63	23.1	71.9	
		12-19-63	17.9	77.1	
		1-14-64	18.1	76.9	
		2-25-64	15.8	79.2	
		3-17-64	16.8	78.2	
		4-14-64	18.0	77.0	
		5-12-64	17.8	77.2	
		6-16-64	20.0	75.0	
6N/08W-07P02 M		7-09-63	□		
		8-12-63	18.1	96.9	5000
		9-16-63	□		
		10-22-63	20.7	94.3	
		11-18-63	19.8	95.2	
		12-19-63	18.2	96.8	
		1-14-64	17.3	97.7	
		2-25-64	16.2	98.8	
		3-16-64	15.5	99.5	
		4-13-64	15.3	99.7	
		5-11-64	17.4	97.6	
		6-16-64	□		
6N/08W-13R01 M	115.0	7-09-63			
		8-12-63			
		9-16-63			
		10-22-63			
		11-18-63			
		12-19-63			
		1-14-64			
		2-25-64			
		3-16-64			
		4-13-64			
		5-11-64			
		6-16-64			
7N/07W-06R01 M	275.0	3-24-64	11.6	263.4	5050
7N/08W-31C01 M	85.0	3-23-64	#		5050
7N/09W-35D02 M	135.0	3-23-64	32.0	103.0	5050
8N/09W-36N01 M	90.0	7-09-63	3.2	86.8	5000
		8-12-63	3.0	87.0	
		9-16-63	8.6	81.4	
		10-22-63	10.2	79.8	
		11-18-63	10.0	80.0	
		12-19-63	8.4	81.6	
		1-14-64	8.5	81.5	
		2-25-64	7.1	82.9	
		3-17-64	7.4	82.6	
		4-14-64	7.8	82.2	
		5-12-64	8.2	81.8	
		6-16-64	8.2		
NORTH COASTAL REGION					
SANTA ROSA AREA					
1-18-01					
1-18-02					
8N/09W-36N01 M	90.0	6-16-64	9.5	80.5	5000
CONT. HEALDSBURG AREA					
8N/09W-03P01 M	77.0	7-09-63	6.0	71.0	5000
		8-12-63	2.4	74.6	
		9-16-63	□	69.7	
		10-22-63	□		
		11-18-63	□		
		12-19-63	□		
		1-14-64	7.0	70.0	
		2-25-64	□		
		3-17-64	9.0*	68.0	
		4-14-64	16.6	60.4	
		5-12-64	5.8	71.2	
		6-16-64	5.8	71.2	
8N/09W-22L01 M	67.0	7-09-63	□		5000
		8-12-63	8.1	58.9	
		9-16-63	□		
		10-22-63	□		
		11-18-63	□		
		12-19-63	□		
		1-14-64	21.0	46.0	
		2-25-64	25.3	41.7	
		3-17-64	24.8	42.2	
		4-14-64	□		
		5-12-64	□		
		6-16-64	31.8	35.2	
9N/09W-28N01 M	90.0	7-09-63	14.7	75.3	5000
		8-12-63	15.1	74.9	
		9-16-63	19.4	70.6	
		10-22-63	15.0	75.0	
		11-18-63	13.6	76.4	
		12-19-63	14.4	75.6	
		1-14-64	14.7	75.3	
		2-25-64	14.3	75.7	
		3-17-64	14.3	75.7	
		4-14-64	14.6	75.4	
		5-12-64	15.1	74.9	
		6-16-64	15.4	74.6	
10N/10W-35O01 M	142.0	7-09-63	3.6	138.4	5000
		8-12-63	4.9	137.1	

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR. TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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NORTH COASTAL REGION

HEALDSBURG AREA

10W/10W-35001 M	142.0				5000
CONC.					
		9-16-63	6.3	135.7	
		10-22-63	6.2	135.8	
		11-18-63	4.9	137.1	
		12-19-63	2.4	139.6	
		1-14-64	3.2	138.8	
		2-25-64	2.4	139.6	
		3-17-64	2.8	139.2	
		4-14-64	3.6	138.4	
		5-12-64	4.1	137.9	
		6-16-64	4.8	137.2	

LOWER RUSSIAN RIVER VALLEY

7N/10W-06N01 M	25.0				5000
		7-09-63	20.9	4.1	
		8-12-63	20.6	4.4	
		9-16-63	20.1	4.9	
		10-22-63	19.8	5.2	
		11-18-63	19.2	5.8	
		12-19-63	17.6	7.4	
		1-14-64	20.1	4.9	
		2-25-64	19.6	5.4	
		3-17-64	19.9	5.1	
		4-14-64	19.7	5.3	
		5-12-64	21.4	3.6	
		6-16-64	21.1	3.9	
					5000
7N/11W-14E01 M	25.0				
		7-09-63	19.0	6.0	
		8-12-63	19.3	5.7	
		9-16-63	19.0	6.0	
		10-22-63	15.8	9.2	
		11-18-63	16.8	8.2	
		12-19-63	17.1	7.9	
		1-14-64	18.4	6.6	
		2-25-64	19.0	6.0	
		3-17-64	18.7	6.3	
		4-14-64	16.8	8.2	
		5-12-64	19.8	5.2	
		6-16-64	20.1	4.9	

TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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SAN FRANCISCO BAY REGION

PETALUMA VALLEY

2-01.00

3N/06W-01001 M	2.0	3-23-64	5	1.5	5050
5N/07W-20802 M	41.0	7-09-63	69.5	28.5	5000
		8-12-63	68.1	27.1	
		9-16-63	67.4	26.4	
		10-22-63	61.9	20.9	
		11-18-63	39.2	1.8	
		12-19-63	55.1	14.1	
		1-14-64	54.1	13.1	
		2-25-64	52.8	11.8	
		3-16-64	49.9	8.9	
		4-13-64	55.3	14.3	
		5-11-64	60.5	19.5	
		6-16-64	60.9	19.9	
5N/07W-21401 M	65.0	7-08-63	33.8	31.2	5000
		8-12-63	39.0	26.0	
		9-16-63	39.1	25.9	
		10-22-63	41.7	23.3	
		11-18-63	42.7	22.3	
		12-19-63	43.4	21.6	
		1-14-64	43.7	21.3	
		2-25-64	40.0	25.0	
		3-16-64	42.7	22.3	
		4-13-64	40.1	24.9	
		5-11-64	41.2	23.8	
		6-16-64	41.2	23.8	
5N/07W-26R01 M	53.6	7-08-63	21.7	31.9	5000
		8-12-63	21.7	31.9	
		9-16-63	21.7	31.9	
		10-22-63	25.4	28.2	
		11-18-63	23.7	29.9	
		12-19-63	24.4	29.2	
		1-14-64	24.4	29.2	
		2-25-64	23.2	30.4	
		3-16-64	23.8	29.8	
		4-13-64	15.3	38.3	
		5-11-64	26.1	27.5	
5N/07W-35X01 M	18.8	3-23-64	22.8	4.0	5050

SAN FRANCISCO BAY REGION

NAPA-SONOMA VALLEY

2-02.00

NAPA VALLEY					
5N/04W-11M01 M	13.0	7-08-63	8.1	4.9	5000
		8-12-63	7.9	5.1	
		9-16-63	8.5	4.5	
		10-21-63	8.0	5.0	
		11-18-63	7.1	5.9	
		12-20-63	7.2	5.8	
		1-13-64	8.7	4.3	
		2-24-64	7.1	5.9	
		3-16-64	7.6	5.4	
		4-13-64	8.4	4.6	
		5-11-64	8.6	4.4	
		6-15-64	8.5	4.5	
6N/04W-17A01 M	67.0	7-08-63	7.2	59.8	5000
		8-13-63	9.8	57.2	
		9-17-63	12.5	54.5	
		10-21-63	12.0	55.0	
		11-19-63	10.8	56.2	
		12-20-63	9.9	57.1	
		1-13-64	10.1	56.9	
		2-24-64	8.2	58.8	
		3-16-64	8.3	58.7	
		4-13-64	8.6	58.4	
		5-11-64	16.4	50.6	
		6-15-64	13.9	51.1	
7N/05W-09Q01 M	155.0	4-06-64	10.0*	145.0	5101
7N/05W-09Q02 M	155.0	7-08-63	10.3	144.7	5000
		8-13-63	16.2*	138.8	
		9-17-63	13.7	141.3	
		10-21-63	14.8	140.2	
		11-19-63	13.8	141.2	
		12-20-63	12.3	142.7	
		1-13-64	11.9	143.1	
		2-24-64	9.8	145.2	
		3-16-64	10.0	145.0	
		4-13-64	10.4	144.6	
		5-11-64	11.2	143.8	
		6-15-64	13.0	142.0	
7N/05W-09Q03 M	155.0	4-06-64	7.1*	147.9	5101
7N/05W-23D02 M	127.0	4-08-64	2.6	124.4	5101

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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SAN FRANCISCO BAY REGION

SUISUN-FAIRFIELD VALLEY

2-03.00

4N/02W-06A01 M	35.0	10-11-63 3-16-64	16.5 18.4	18.5 18.6	5109
4N/02W-09A01 M	7.0	10-15-63 3-16-64	4.9 3.6	2.1 3.4	5109
4N/03W-01D01 M	37.0	10-15-63 3-16-64	8.0 5.4	29.0 31.6	5109
5N/01E-36A01 M	24.0	10-16-63 3-16-64	9.8 13.2	14.2 10.8	5109
5N/01W-07E01 M	115.0	10-16-63 3-16-64	13.3 11.8	101.7 103.2	5109
5N/01W-28P01 M	15.0	10-16-63 3-16-64	□ □		5109
5N/02W-17D02 M	101.0	10-16-63 3-17-64	# □		5109
5N/02W-27J02 M	24.0	7-08-63 8-12-63 9-16-63 10-21-63 11-18-63 12-20-63 1-13-64 2-24-64 3-16-64 4-13-64 5-11-64 6-15-64	21.0 21.3 23.1 23.0 21.8 14.8 12.3 9.8 9.1 8.8 2.6 13.6	3.0 2.7 0.9 1.0 2.2 9.2 11.7 14.2 14.9 15.2 21.4 10.4	5000
5N/02W-29R01 M	46.0	10-16-63 3-16-64	13.7 9.9	32.3 36.1	5109
5N/02W-30J01 M	65.0	7-08-63 8-12-63 9-16-63 10-21-63 11-18-63 12-20-63 1-13-64 2-24-64	20.3 23.0 23.0 23.6 23.5 23.4 23.9 23.0	44.7 44.0 42.6 41.5 41.6 41.1 42.0	5000

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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SAN FRANCISCO BAY REGION

NAPA VALLEY

2-02.01

8N/06W-10001 M	290.0	7-08-63 8-13-63 9-17-63 10-21-63 11-19-63 12-20-63 1-13-64 2-24-64 3-16-64 4-13-64 5-11-64 6-15-64	3.8 5.0 6.6 7.4 3.8 3.4 4.2 2.1 2.5 3.2 4.0 5.0	286.2 285.0 283.4 282.6 284.2 286.8 285.8 287.9 287.5 286.8 286.0 285.0	5000
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SOMOMA VALLEY

2-02.02

5N/05W-17C01 M	85.0	7-08-63 8-12-63 9-16-63 10-22-63 11-00-63 12-19-63 1-00-64 2-24-64 3-24-64 4-13-64 5-00-64 6-16-64	18.8 20.3 21.8 20.5 □ 17.9 □ 13.8 16.2 16.6 □ 19.4	66.2 64.7 63.2 64.5 67.1 71.2 68.8 68.4 65.6	5000
5N/05W-28N01 M	11.0	3-24-64	6.9	4.1	5050
5N/05W-29N01 M	16.0	7-08-63 8-12-63 9-16-63 10-22-63 11-18-63 12-19-63 1-14-64 2-24-64 3-16-64 4-13-64 5-11-64 6-16-64	9.4 10.6 11.6 12.0 11.5 10.0 10.3 8.3 8.8 7.2 9.5 10.1	6.6 5.4 4.4 4.0 4.5 6.0 5.7 7.7 7.2 6.5 5.9	5000

TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SUITSUN-FAIRFIELD VALLEY					
2-03+00					
5N/02W-30J01 M	65+0	3-16-64	23+3	41+7	5000
CONT.		4-13-64	23+2	41+8	
		5-11-64	20+2	44+8	
		6-15-64	19+5	45+5	
5N/03W-26F02 M	111+0	10-17-63	□		5109
		3-18-64	□		
YGNACIO VALLEY					
2-06+00					
1N/01W-07K01 M	83+0	7-18-63	7+2	75+8	5050
		8-24-63	10+2	72+8	
		9-23-63	10+6	72+2	
		10-21-63	10+1	72+9	
		11-19-63	9+5	73+5	
		12-17-63	9+2	73+8	
		1-20-64	9+0	74+0	
		2-17-64	10+8	72+2	
		3-17-64	9+9	73+1	
		4-20-64	10+5	72+5	
		5-18-64	9+7	73+3	
		6-19-64	□		
1N/02W-11N01 M	63+0	9-23-63	15+2	47+8	5050
		3-17-64	12+9	50+1	
2N/02W-27R01 M	15+0	7-18-63	6+2	8+8	5050
		8-24-63	4+4	10+6	
		9-23-63	4+3	10+7	
		10-21-63	3+5	11+5	
		11-19-63	2+8	12+2	
		12-17-63	2+9	12+1	
		1-20-64	2+5	12+5	
		2-17-64	2+3	12+7	
		3-17-64	2+6	12+4	
		4-20-64	2+8	12+2	
		5-18-64	4+4	10+6	
		6-19-64	5+3	9+7	
2N/02W-36E01 M	48+0	3-17-64	16+0	32+0	5050

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SANTA CLARA VALLEY					
2-09+00					
SOUTH ALAMEDA COUNTY UPR AQUIFER					
2-09+01					
3S/02W-08R05 M	64+0	9-00-63	33+0	31+0	5100
		4-00-64	34+0	30+0	
3S/03W-24Q02 M	8+0	9-00-63	8+5	-	5100
		4-00-64	7+0	-	
4S/01W-18G01 M	41+0	7-19-63	82+7	-	5401
		8-23-63	85+4	-	
		9-00-63	□	-	
		10-23-63	84+3	-	
		11-22-63	□	-	
		12-20-63	81+3	-	
		1-24-64	78+3	-	
		2-28-64	74+3	-	
		3-27-64	73+6	-	
		4-17-64	74+3	-	
		5-15-64	78+5	-	
		6-12-64	83+6	-	
4S/01W-22P05 M	80+0	9-00-63	48+2	31+8	5100
		4-00-64	48+2	31+8	
4S/01W-29C04 M	55+0	9-20-63	92+0	-	5401
		3-20-64	83+6	-	
4S/02W-24Q02 M	33+4	9-00-63	66+7	-	5100
		4-00-64	□	-	
5S/01W-04F01 M	42+0	7-19-63	72+1	-	5401
		8-23-63	69+9	-	
		9-20-63	72+1	-	
		10-18-63	72+2	-	
		11-15-63	72+0	-	
		12-20-63	72+2	-	
		1-24-64	71+1	-	
		2-21-64	70+9	-	
		3-20-64	70+6	-	
		4-24-64	70+6	-	
		5-22-64	70+3	-	
		6-19-64	70+8	-	

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SOUTH ALAMEDA COUNTY UPR AQUIFER 2-09-01					
55/01N-09001 M	19.5	4-00-64	□	5100	5100
CONT.					
25/03N-36R01 M	45.0	9-00-63	172.0*	- 127.0	5100
		4-00-64	183.5*	- 118.5	
35/02N-19A02 M	30.0	7-08-63	70.9	9.1	5050
		8-24-63	23.4	6.2	
		9-24-63	25.2	4.6	
		10-21-63	25.0	5.0	
		11-19-63	22.8	7.2	
		12-17-63	21.1	8.2	
		1-22-64	21.1	8.9	
		2-18-64	20.2	9.8	
		3-17-64	20.1	9.9	
		4-21-64	20.0	10.0	
		5-18-64	20.6	9.4	
		6-19-64	21.4	8.6	
35/03N-24J01 M	11.0	9-00-63	77.6	- 66.6	5100
		4-00-64	76.3	- 65.3	
45/02N-02001 M	26.0	9-00-63	□	5100	5100
		4-07-64	89.7	- 63.7	
45/02N-35R02 M	15.0	7-19-63	82.5	- 67.5	5401
		8-23-63	81.8	- 66.8	
		9-20-63	79.4	- 64.4	
		10-00-63	□		
		11-00-63	□		
		12-00-63	□		
		1-00-64	□		
		2-00-64	□		
		3-00-64	□		
		4-00-64	□		
		5-00-64	□		
		6-00-64	□		
45/02N-36R01 M	24.0	7-19-63	93.2	- 69.2	5401
		8-23-63	94.2	- 70.2	
		9-20-63	92.1	- 68.1	
		10-18-63	87.4	- 63.4	
		11-15-63	81.1	- 57.1	
		12-20-63	72.4	- 48.4	
		1-24-64	64.9	- 40.9	
		2-21-64	66.4	- 42.4	
SOUTH ALAMEDA COUNTY LWR AQUIFER 2-09-01					
45/02N-36K01 M	24.0	3-20-64	71.5	- 47.5	5401
CONT.					
		4-17-64	74.2	- 50.2	
		5-22-64	84.5	- 60.5	
		6-19-64	83.5	- 59.5	
55/01N-09N01 M	15.0	9-00-63	89.3	- 74.3	5100
		4-00-64	□		
NORTH SANTA CLARA COUNTY 2-09-02					
65/01E-07E01 M	15.8	7-24-63	127.3*	- 111.5	2400
		8-22-63	121.5	- 105.7	
		9-23-63	124.3	- 108.5	
		10-22-63	109.4	- 93.6	
		11-21-63	104.1	- 88.3	
		12-19-63	97.3	- 81.5	
		1-22-64	79.5	- 63.7	
		2-21-64	80.9	- 65.1	
		3-19-64	84.1	- 68.3	
		4-17-64	106.8	- 91.0	
		5-21-64	112.8	- 97.0	
		6-18-64	117.2	- 101.4	
65/01E-21R01 M	138.0	7-23-63	232.8	- 94.8	2400
		8-21-63	238.2	- 100.2	
		9-20-63	□		
		10-21-63	234.6	- 96.6	
		11-20-63	225.3	- 87.3	
		12-17-63	219.1	- 81.1	
		1-17-64	213.6	- 75.6	
		2-20-64	209.5	- 71.5	
		3-18-64	221.9	- 83.9	
		4-16-64	239.4	- 101.4	
		5-28-64	□		
		6-17-64	□		
65/01E-23P02 M	240.5	7-22-63	154.7*	85.8	2400
		8-19-63	157.7	82.8	
		9-19-63	156.8	81.7	
		10-18-63	161.6	78.9	
		11-18-63	161.8	78.7	
		12-17-63	163.3	77.2	
		1-17-64	164.8	75.7	
		2-19-64	165.4	75.1	
		3-18-64	164.2	76.3	

TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY					
2-09-02					
6S/01E-23P02 M CONT.	240.5	4-16-64 5-19-64 6-16-64	169.2 175.9 168.3	71.3 64.6 72.2	2400
6S/01E-30M01 M	43.0	7-25-63 8-22-63 9-23-63 10-23-63 11-21-63 12-19-63	153.1 143.4 139.7 114.7 105.1 98.4	- 110.1 - 100.4 - 96.7 - 71.7 - 62.1 - 55.4	2400
		1-23-64 2-24-64 3-26-64 4-20-64 5-21-64 6-19-64	95.5 90.0* 93.0* 120.0* 128.7 133.8	- 52.5 - 47.0 - 50.0 - 77.0 - 85.7 - 90.8	
6S/01W-23E01 M	21.0	7-15-63 8-12-63 9-10-63 10-08-63 11-06-63 12-06-63	162.3 131.2 158.6 150.2 104.3 93.8	- 141.3 - 110.2 - 137.6 - 107.2 - 95.3 - 72.8	5000
		1-05-64 2-07-64 3-07-64 4-20-64 5-00-64 6-22-64	83.3 116.3 131.0	- 62.3 - 95.3 - 110.0	
6S/02N-16R01 M	48.7	7-30-63 8-26-63 9-28-63 10-28-63 11-26-63 12-27-63	142.0 139.0* 135.4 130.6 125.5 122.0	- 94.0 - 91.0 - 87.4 - 92.6 - 77.5 - 74.0	2400
		1-27-64 2-26-64 3-30-64 4-28-64 5-25-64 6-25-64	120.8 119.4 120.3 133.9 132.8 134.1	- 72.8 - 71.4 - 72.3 - 85.9 - 84.8 - 86.1	
6S/02W-25C01 M	73.0	7-26-63 8-23-63 9-26-63 10-28-63 11-27-63 12-27-63	156.9 153.7 153.3 152.9 149.2 139.5	- 83.9 - 80.7 - 76.7 - 65.3 - 64.9 - 51.5	2400
		1-24-64 2-27-64	132.9 128.2	- 44.9 - 40.2	
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY					
2-09-02					
6S/02W-25C01 M CONT.	73.0	9-25-63 10-25-63 11-23-63 12-23-63	149.8 141.4 139.2 127.8	- 76.8 - 68.4 - 66.2 - 54.8	2400
		1-24-64 2-25-64 3-27-64 4-29-64 5-25-64 6-24-64	128.3 127.5 132.0* 144.5* 155.8* 149.7	- 55.3 - 54.5 - 59.0 - 71.5 - 82.8 - 76.7	
6S/02W-35C01 M	140.1	7-29-63 8-26-63 9-26-63 10-28-63 11-23-63 12-26-63	255.8 262.7* 260.6 266.7* 267.4* 237.4*	- 115.7 - 122.6 - 120.6 - 109.6 - 99.9 - 91.1	2400
		1-27-64 2-26-64 3-30-64 4-23-64 5-35-64 6-25-64	231.2* 232.9* 241.7* 250.9* 252.8* 271.9*	- 92.8 - 101.6 - 104.8 - 122.7 - 131.8	
7S/01E-01K01 M	179.0	7-19-63 8-19-63 9-19-63 10-18-63 11-18-63 12-16-63	199.5 198.7 201.8 200.6 198.8 197.4	- 20.5 - 19.7 - 22.8 - 21.6 - 19.8 - 18.4	2400
		1-15-64 2-18-64 3-17-64 4-15-64 5-14-64 6-15-64	196.1 195.2 195.4 195.0 195.4 196.9	- 17.1 - 16.2 - 16.4 - 16.0 - 16.4 - 17.9	
7S/01E-08L01 M	88.0	7-24-63 8-27-63 9-26-63 10-28-63 11-27-63 12-27-63	164.0 164.7 153.3 152.9 149.2 139.5	- 76.0 - 76.7 - 65.3 - 64.9 - 61.2 - 51.5	2400
		1-24-64 2-27-64	132.9 128.2	- 44.9 - 40.2	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE TO SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY					
2-09-02					
75/O1E-08L01 M CONT.	88.0	3-27-64	127.9	- 39.9	2400
		4-24-64	141.4	- 53.4	
		5-27-64	146.0	- 61.0	
		6-29-64	156.2	- 68.2	
75/O1E-09002 M	95.9	7-01-63	177.0	- 81.1	2400
		8-01-63	178.5	- 82.6	
		9-01-63	189.5	- 93.6	
		10-01-63	186.5	- 90.6	
		11-01-63	166.5	- 73.6	
		12-01-63	159.5	- 65.6	
		1-01-64	151.5	- 55.6	
		2-01-64	147.5	- 51.6	
		3-01-64	141.5	- 45.6	
		4-01-64	141.5	- 45.6	
		5-01-64	162.5	- 66.6	
		6-01-64	161.5	- 65.6	
75/O1E-16C05 M	105.0	7-15-63	226.6	- 121.6	5000
		8-12-63	226.2	- 121.2	
		9-10-63	229.9	- 128.9	
		10-08-63	231.4	- 126.4	
		11-05-63	193.9	- 88.9	
		12-06-63	187.9	- 82.9	
		1-08-64	188.9	- 83.9	
		2-07-64	169.7	- 64.7	
		3-06-64	174.0	- 69.0	
		4-02-64	160.5	- 55.5	
		5-00-64	a	-	
		6-22-64	213.9	- 108.9	
75/O1E-31A02 M	151.6	7-02-63	162.4	- 10.8	2400
		8-05-63	163.6	- 12.0	
		9-06-63	170.3	- 18.7	
		10-02-63	174.6*	- 23.0	
		11-04-63	169.8	- 18.2	
		12-03-63	153.8	- 2.2	
		1-02-64	157.7*	- 6.1	
		2-03-64	152.9	- 1.3	
		3-03-64	137.8*	- 13.8	
		4-03-64	145.0*	- 6.6	
75/O2E-07P01 M	130.0	5-05-64	141.7	- 9.9	
		6-02-64	153.8	- 2.2	
		7-19-63	144.3	- 14.3	2400

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE TO SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY					
2-09-02					
75/O2E-07P01 M CONT.	130.0	8-19-63	142.4	- 12.4	2400
		9-19-63	143.0	- 13.0	
		10-18-63	140.5	- 10.5	
		11-18-63	139.7	- 8.7	
		12-16-63	137.4	- 7.4	
		1-13-64	136.9	- 6.9	
		2-18-64	136.4	- 6.4	
		3-17-64	136.2	- 6.2	
		4-19-64	136.1	- 6.1	
		5-19-64	134.5	- 4.5	
		6-15-64	136.1	- 6.1	
75/O2E-17H01 M	349.0	7-18-63	100.8	- 248.2	2400
		8-15-63	98.7	- 250.3	
		9-19-63	97.4	- 251.6	
		10-16-63	96.6	- 252.4	
		11-18-63	95.7	- 253.3	
		12-16-63	96.4	- 252.6	
		1-15-64	98.3	- 250.7	
		2-18-64	95.4	- 253.6	
		3-16-64	96.3	- 252.7	
		4-15-64	97.2	- 251.8	
		5-18-64	96.5	- 252.5	
		6-15-64	97.2	- 251.8	
75/O2E-33C01 M	462.0	7-18-63	20.2	- 441.8	2400
		8-15-63	19.5	- 442.5	
		9-18-63	21.4	- 440.6	
		10-16-63	20.9	- 441.1	
		11-15-63	21.3	- 440.7	
		12-13-63	20.7	- 441.3	
		1-14-64	21.1	- 440.9	
		2-18-64	20.8	- 441.2	
		3-16-64	21.2	- 440.8	
		4-14-64	20.8	- 441.2	
		5-18-64	20.6	- 441.6	
		6-12-64	20.2	- 441.8	
75/O1W-35C01 M	202.0	7-01-63	198.0	- 4.0	2400
		8-01-63	196.0	- 6.0	
		9-01-63	194.0	- 8.0	
		10-01-63	200.0	- 2.0	
		11-01-63	194.0	- 8.0	
		12-01-63	193.0	- 9.0	
		1-02-64	193.0*	- 9.0	

TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE ELEVATION IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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SAN FRANCISCO BAY REGION

NORTH SANTA CLARA COUNTY

2-09-02

75/01W-35C01 M	202-0	2-03-64	186-0	16-0	2400
CONT.		3-02-64	189-0	13-0	
		4-02-64	195-0	7-0	
		5-01-64	216-0	-	
		6-01-64	230-0	- 28-0	
		7-31-63	363-0	- 146-3	2400
75/02W-03Q01 M	216-7	8-02-63	363-0	- 146-3	
		9-01-63	368-0	- 151-3	
		10-01-63	374-0	- 157-3	
		10-30-63	359-0	- 142-3	
		12-01-63	343-0	- 126-3	
		1-02-64	335-0	- 118-3	
		2-01-64	□		
		3-02-64	333-0	- 116-3	
		4-02-64	336-0*	- 119-3	
		5-03-64	343-0	- 126-3	
		6-01-64	350-0	- 133-3	
75/02W-04B01 M	218-0	7-30-63	193-3	24-7	2400
		8-28-63	194-9	23-1	
		9-26-63	193-1	24-9	
		10-29-63	194-7*	23-3	
		11-26-63	194-2*	23-8	
		12-27-63	193-9*	24-1	
		1-28-64	193-7*	24-3	
		2-26-64	193-9	24-1	
		3-30-64	193-0*	25-0	
		4-24-64	194-2	23-8	
		5-26-64	197-3	20-7	
		6-26-64	196-7	21-3	
75/02W-22A01 M	34-0-0	7-30-63	□		2400
		8-28-63	15-9	324-1	
		9-27-63	□		
		10-29-63	17-5	322-5	
		11-26-63	19-0*	321-0	
		12-27-63	20-0	320-0	
		1-28-64	18-0	322-0	
		2-26-64	23-0*	317-0	
		3-31-64	□		
		4-27-64	29-9	310-1	
		5-26-64	23-3*	316-7	
		6-26-64	22-5	317-5	

SAN FRANCISCO BAY REGION

NORTH SANTA CLARA COUNTY

2-09-02

85/01E-07H02 M	207-0	8-06-63	70-2	136-8	2400
CONT.		9-10-63	70-1	136-9	
		10-16-63	73-4	133-6	
		11-05-63	73-3	133-7	
		12-04-63	74-8	132-2	
		1-03-64	76-6	130-4	
		2-04-64	76-0	130-6	
		3-04-64	76-0	131-0	
		4-03-64	79-1	127-9	
		5-06-64	83-9	123-1	
		6-29-64	93-7	113-3	
85/01E-13H01 M	184-6	7-09-63	31-9	152-7	2400
		8-07-63	30-1	154-5	
		9-12-63	24-5	160-1	
		10-04-63	25-6	159-0	
		11-07-63	23-7	160-9	
		12-05-63	19-9	164-7	
		1-07-64	18-8	165-8	
		2-06-64	15-1	169-5	
		3-09-64	20-5*	164-1	
		4-07-64	24-4	160-2	
		5-07-64	26-8	157-8	
		6-04-64	24-8	159-8	
85/02E-20F03 M	209-0	7-10-63	31-8	177-2	2400
		8-08-63	28-4	180-6	
		9-12-63	24-5	184-5	
		10-07-63	23-0	186-0	
		11-07-63	22-3	186-7	
		12-06-63	21-1	187-9	
		1-07-64	22-1	186-9	
		2-07-64	21-3	187-7	
		3-09-64	23-8	185-2	
		4-07-64	25-7	183-3	
		5-07-64	24-1	184-9	
		6-04-64	24-1	184-9	
85/02E-22D01 M	239-7	7-10-63	12-1	227-6	2400
		8-08-63	10-0	229-7	
		9-12-63	10-2	229-5	
		10-07-63	9-9	229-8	
		11-07-63	9-7	230-0	
		12-06-63	10-4	229-3	
		1-08-64	11-7	228-0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE OF WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE OF WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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SAN FRANCISCO BAY REGION

NORTH SANTA CLARA COUNTY

2-09-02

8S/02E-22D01 M CONT.	239.7	2-07-64 3-09-64 4-07-64 5-08-64 6-04-64	13.3 14.1 12.6 11.7 11.2	226.4 225.6 227.1 228.0 228.5	2400
8S/01W-15B01 M	331.2	7-02-63 8-05-63 9-10-63 10-02-63 11-04-63 12-03-63 1-03-64 2-04-64 3-03-64 4-03-64 5-27-64 6-02-64	31.5 30.7 32.4 34.1 33.4 33.4 33.4 33.9 35.3 34.7 34.6	299.7 300.5 298.8 297.1 297.8 297.8 297.3 295.9 296.5 296.6	2400
9S/02E-01J01 M	314.6	7-15-63 8-12-63 9-12-63 10-11-63 11-08-63 12-10-63 1-10-64 2-08-64 3-11-64 4-10-64 5-11-64 6-29-64	29.3 28.0 28.1 30.4 31.7 34.3 32.1 33.6 35.1 36.0 36.9 38.1	285.3 286.6 286.5 284.2 282.9 280.3 282.5 281.0 279.5 278.6 277.7 276.5	2400
9S/02E-01M01 M	287.6	7-11-63 8-08-63 9-13-63 10-07-63 11-08-63 12-06-63 1-08-64 2-08-64 3-09-64 4-08-64 5-08-64 6-05-64	20.8 20.5 21.7 23.7 23.9 23.3 23.3 23.8 23.2 23.2 26.1 28.1	266.8 267.1 265.7 263.9 263.7 264.3 264.3 261.8 264.4 264.4 261.5 259.5	2400

SAN FRANCISCO BAY REGION

LIVERMORE VALLEY

2-10-00

2S/02E-25N01 M	555.3	9-00-63 4-00-64	10.7 10.2	544.6 545.1	5100
2S/01W-26C01 M	416.9	9-00-63 4-00-64	93.2 67.2	323.7 349.7	5100
3S/01E-11H01 M	372.9	9-00-63 4-00-64	137.2 123.0	235.7 249.9	5100
3S/02E-02R01 M	562.2	9-00-63 4-00-64	□ □	□ □	5100
3S/02E-10H01 M	551.0	9-00-63 4-00-64	99.5 □	451.5 □	5100
HALF MOON BAY TERRACE			2-22-00		
5S/05W-20L01 M	73.0	7-19-63 8-23-63 9-27-63 10-22-63 11-22-63 12-19-63 1-23-64 2-20-64 3-24-64	13.5 13.7 15.7 15.0 13.8 12.1 16.3 15.3	59.5 58.7 58.1 58.1 59.2 40.9 54.7 57.7	5050
5S/05W-29N01 M	46.0	3-24-64	31.1	14.9	5050
6S/05W-08B01 M	108.0	4-23-64	53.9	54.1	5050
SAN GREGORIO VALLEY			2-24-00		
7S/05W-13E01 M	80.0	7-19-63 8-23-63 9-27-63 10-22-63 11-22-63 12-19-63 1-23-64 2-20-64 3-19-64 4-23-64 5-21-64 6-19-64	□ □ 12.0 11.9 11.4 11.5 10.8 11.2 11.3 11.5 11.8 12.1	68.0 68.1 68.6 68.5 69.2 68.8 68.7 68.5 68.2 67.9	5050

TABLE C-3
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE ELEVATION IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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SAN FRANCISCO BAY REGION

SAN GREGORIO VALLEY

2-24.00

75/05W-15C01 M	80.0	3-24-64	12.4	67.6	5050
75/05W-15E01 M	75.2	3-24-64	6.0	69.2	5050
75/05W-15E02 M	30.0	7-19-63	□		5050
		8-23-63	14.4	15.6	
		9-27-63	14.4	15.6	
		10-22-63	14.5	15.5	
		11-22-63	13.6	16.4	
		12-19-63	13.8	16.2	
		1-23-64	12.7	17.3	
		2-20-64	13.3	16.7	
		3-19-64	13.6	16.4	
		4-23-64	13.7	16.3	
		5-21-64	14.3	15.7	
		6-19-64	13.8	16.2	
75/05W-15H02 M	40.0	3-24-64	16.2	23.8	5050

PESCADERO VALLEY

2-26.00

85/05W-09H01 M	20.0	7-19-63	5.0	15.0	5050
		8-23-63	□		
		9-27-63	4.9	15.1	
		10-22-63	4.8	15.2	
		11-22-63	4.2	15.8	
		12-19-63	4.3	15.7	
		1-23-64	3.9	16.1	
		2-20-64	4.4	15.6	
		3-19-64	4.7	15.3	
		4-23-64	4.8	15.2	
		5-21-64	4.9	15.1	
		6-19-64	5.0	15.0	
85/05W-11M01 M	45.0	3-24-64	10.4	34.6	5050

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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CENTRAL COASTAL REGION

SOQUEL VALLEY

3-01.00

11S/01W-09L01 M	124.2	7-19-63 8-23-63 9-25-63 10-27-63 11-21-63 12-19-63 1-23-64 2-19-64 3-19-64 4-23-64 5-20-64 6-19-64	67.1 57.3 58.3 57.1 56.9 57.1 57.0 59.3 58.4 57.6 57.9 57.5	57.1 66.9 65.9 67.1 67.3 67.2 64.9 65.8 66.6 66.3 66.7	5050
11S/01W-15H01 M	91.7	11-21-63 12-19-63 1-23-64 2-19-64 3-19-64 4-23-64 5-20-64 6-19-64	59.9 60.6 60.3 59.9 58.8 58.4 58.9 58.0	31.8 31.4 31.4 31.8 32.9 33.3 32.8 33.7	5050

PAJARO VALLEY

3-02.00

12S/01E-24G01 M	9.4	7-18-63 8-23-63 9-25-63 10-22-63 11-21-63 12-19-63 1-22-64 2-19-64 3-17-64 4-22-64 5-20-64 6-18-64	18.2 22.5 8.5 6.6 5.6 5.5 3.4 6.0 9.4 16.1 16.1 27.9	8.8 13.1 0.9 2.8 3.8 3.9 3.4 0.0 6.7 6.7 18.5	5050
12S/02E-16J01 M	20.5	7-18-63 8-23-63 9-25-63 10-22-63 11-21-63 12-19-63 1-22-64 2-19-64	22.6 22.6 16.3 14.5 12.6 12.6 12.0 12.0	2.1 4.2 6.0 7.9 8.1 8.5	5050

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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CENTRAL COASTAL REGION

PAJARO VALLEY

3-02.00

12S/02E-16J01 M CONT.	20.5	3-17-64 4-22-64 5-20-64 6-18-64	13.8 20.7 22.2 22.2	6.7 0.2 1.7	5050
12S/02E-31K01 M	30.0	11-21-63 1-10-64 3-19-64	28.4 26.5 26.0	1.6 3.5 4.0	5050 5100 5050
13S/02E-05B01 M	136.0	7-18-63 8-23-63 9-25-63 10-22-63 11-21-63 12-19-63 1-22-64 2-19-64 3-17-64 4-22-64 5-20-64 6-18-64	136.0 139.3 139.1 137.8 137.6 137.3 135.3 136.7 135.4 136.7 137.5	3.3 3.1 1.8 1.6 1.3 0.7 0.6 0.7 1.5	5050

GILROY-HOLLISTER VALLEY

3-03.00

SOUTH SANTA CLARA COUNTY	347.0	7-11-63 8-09-63 9-16-63 10-09-63 11-12-63 12-09-63 1-09-64 2-10-64 3-10-64 4-09-64 5-11-64 6-09-64	86.9 88.4 79.6 87.4 80.1 79.7 73.6 70.2 68.9 69.3 73.3 80.7	260.1 258.6 267.4 259.6 266.9 267.3 273.4 276.8 278.1 277.7 273.7 266.3	2400
9S/03E-27C02 M	347.0	7-11-63 8-09-63 9-16-63 10-09-63 11-12-63 12-09-63 1-09-64 2-10-64 3-10-64 4-09-64 5-11-64 6-09-64	86.9 88.4 79.6 87.4 80.1 79.7 73.6 70.2 68.9 69.3 73.3 80.7	260.1 258.6 267.4 259.6 266.9 267.3 273.4 276.8 278.1 277.7 273.7 266.3	2400
9S/03E-29B01 M	397.6	3-18-64	13.0	384.6	5050
10S/03E-34L01 M	249.3	7-18-63 8-22-63 9-24-63 10-23-63	7.9 7.8 8.2 8.4	241.4 241.5 241.1 240.9	5050

TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE WATER ELEVATION IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
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CENTRAL COASTAL REGION

SOUTH SANTA CLARA COUNTY

3-03-01

105/03E-34L01 M	249.3	11-20-63	8.1	241.2	5050
CONT.		12-18-63	9.3	240.0	
		1-22-64	8.2	241.1	
		2-18-64	8.2	241.1	
		3-19-64	8.1	241.2	
		4-01-64	8.1	241.2	
		5-00-64	#		

105/04E-18G02 M	259.5	7-18-63	63.4	196.1	5050
		8-22-63	55.9	203.6	
		9-26-63	53.7		
		10-23-63	53.7	205.8	
		11-20-63	48.4	211.1	
		12-18-63	48.3	211.2	
		1-22-64	50.8	208.7	
		2-18-64	50.6	208.9	
		3-18-64	52.4	207.1	
		4-21-64	59.6	199.9	
		5-19-64	68.7	190.8	
		6-17-64	72.9	188.6	
105/04E-35E01 M	248.0	3-19-64	86.7	161.3	5050
115/03E-01B01 M	227.0	4-00-64	□		5400

SAN BENITO COUNTY

3-03-02

115/05E-13001 M	255.7	7-18-63	22.8	232.9	5050
		8-22-63	22.9	232.8	
		9-24-63	24.1	231.6	
		10-23-63	21.5	238.2	
		11-20-63	21.1	238.6	
		12-18-63	21.6	234.1	
		1-22-64	22.5	233.2	
		2-18-64	23.2	232.5	
		3-20-64	28.0	227.7	
		4-21-64	□		
		5-19-64	33.0	222.7	
		6-17-64	□		
		7-00-63	36.3	116.6	5101
125/04E-20C01 M	152.9	4-00-64			
125/05E-33A01 M	280.0	7-00-63	□		5050
		8-00-63	□		

CENTRAL COASTAL REGION

SAN BENITO COUNTY

3-03-02

125/05E-33A01 M	280.0	10-24-63	90.1	189.9	5050
CONT.		11-20-63	89.8	190.2	
		12-18-63	92.4	187.6	
		1-22-64	91.9	188.1	
		2-19-64	88.5	191.5	
		3-19-64	90.2	189.8	
		4-22-64	□		
		5-19-64	98.8	181.2	
		6-18-64	100.0	180.0	
		4-00-64	54.6	270.9	5101

3-04-00

3-04-01

SALINAS VALLEY					
PRESSURE AREA 180 FOOT AQUIFER					
145/02E-03C01 M	10.6	12-05-63	12.6	- 2.0	2100
		3-26-64	14.6	- 4.0	
		12-09-63	19.7	3.3	2100
145/02E-15L01 M	23.0	3-25-64	□		
155/02E-01001 M	42.0	7-17-63	□		2100
		8-16-63	□		
		9-18-63	□		
		10-15-63	44.6	- 2.6	
		11-14-63	□		
		12-09-63	33.5	8.5	
		12-09-63	33.5	8.5	
		1-21-64	□		
		2-17-64	□		
		4-08-64	35.8	6.2	
		5-15-64	□		
		6-17-64	□		
155/03E-16M01 M	58.0	12-11-63	46.2	11.8	2100
		4-08-64	46.8	11.2	
155/04E-33A01 M	125.0	12-30-63	84.9	40.1	2100
		4-07-64	87.7	37.3	
		12-31-63	50.2	59.8	2100
165/04E-11D01 M	110.0	4-08-64	49.7	60.3	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
PRESSURE AREA 400 FOOT AQUIFER					
135/02E-31001 M	111.0	12-03-63 3-19-64	8.5 □	2.5	2100
145/03E-18J01 M	69.0	7-17-63 8-16-63 9-19-63 10-16-63 11-14-63 12-16-63 1-21-64 2-17-64 3-26-64 4-06-64 5-17-64 6-17-64	100.7 □ 99.4 79.6 71.2 66.7 64.7 64.3 72.3 80.1 82.3 94.3	- 31.7 - 30.4 - 2.2 2.3 4.3 4.7 - 11.1 13.3 25.3	2100
EAST SIOE AREA					
165/05E-17R01 M	181.0	1-02-64 4-07-64	109.7 □	71.3	2100
ARROYO SECO CONE					
185/06E-15M01 M	277.0	12-18-63 3-30-64	90.0 □	187.0	2100
195/06E-11C01 M	373.0	7-16-63 8-13-63 9-17-63 10-14-63 11-13-63 12-13-63 1-20-64 2-19-64 3-23-64 4-00-64 5-14-64 6-16-64	160.5 173.1 173.8 168.1 170.4 158.9 161.0 155.5 158.3 □ 167.0 175.3	212.5 199.9 199.2 204.9 202.6 214.1 212.0 217.5 214.7 206.0 197.7	2100
UPPER VALLEY AREA					
195/07E-10P01 M	315.0	7-15-63 8-13-63 9-18-63 10-14-63	□ □ 86.5 83.6	228.5 231.4	2100

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
UPPER VALLEY AREA					
195/07E-10P01 M CONT.	315.0	11-15-63 12-11-63 1-20-64 2-18-64 3-23-64 4-00-64 5-13-64 6-16-64	82.3 □ 83.6 □ 84.9 □ □ □	232.7 231.4 230.1	2100
205/08E-05R01 M	337.0	9-18-63 10-14-63 11-13-63 12-14-63 3-20-64	69.6 □ 66.5 66.3 □	267.4 270.5 270.7	2100
215/09E-08K01 M	344.0	12-06-63 3-19-64	12.5 □	331.5	2100
215/10E-32N01 M	400.0	12-06-63 3-18-64	20.8 □	379.2	2100
225/10E-16K01 M	472.0	12-05-63 3-18-64	70.0 □	402.0	2100
PASO ROBLES					
245/10E-11C01 M	618.0	3-30-64	50.7	567.3	5100
245/11E-25N01 M	603.0	3-30-64	38.1	564.9	5100
245/11E-33R01 M	564.0	3-30-64	35.3	528.7	5100
245/11E-35J01 M	616.8	3-30-64	62.2	554.6	5100
245/12E-17N01 M	769.5	3-30-64	16.8	752.7	5100
245/15E-33C01 M	1225.0	3-31-64	24.0	1201.0	5100
255/11E-35G01 M	879.8	3-31-64	30.9	848.9	5100
255/12E-17J01 M	639.0	3-31-64	63.2	575.8	5100
255/12E-17R01 M	639.0	3-30-64	57.1	581.9	5100
255/12E-26K01 M	747.5	3-31-64	115.6	631.9	5100

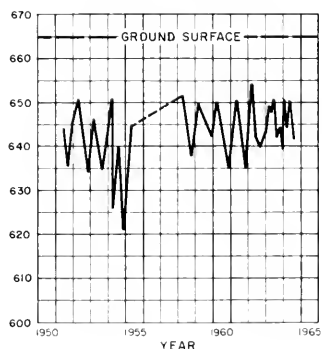
TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE TO SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SURVEYING DATA
CENTRAL COASTAL REGION					
PASO ROBLES					
3-04.06					
25S/13E-11E01 M	1184.0	3-31-64	60.4	1123.6	5100
25S/16E-17L01 M	1164.5	3-31-64	62.5	1102.0	5100
25S/16E-30M01 M	1218.0	3-31-64	71.9	1146.1	5100
26S/12E-04N01 M	674.5	3-30-64	45.0	629.5	5100
26S/12E-26E01 M	839.0	4-03-64	194.4	644.6	5100
26S/12E-35M01 M	818.0	4-03-64	146.4	671.6	5100
26S/13E-10D01 M	799.0	4-03-64	16.6	782.4	5100
26S/13E-34B01 M	1005.0	4-03-64	161.8	843.2	5100
26S/14E-16L01 M	1018.0	4-03-64	73.2	944.8	5100
26S/14E-35D01 M	1134.5	4-02-64	119.1	1015.4	5100
26S/15E-02B01 M	1114.0	3-31-64	29.6	1084.4	5100
26S/15E-28O02 M	1111.4	4-02-64	83.0	1028.4	5100
26S/15E-29N01 M	1134.4	4-02-64	100.0	1034.4	5100
27S/12E-21N01 M	747.5	4-03-64	6.6	740.9	5100
27S/13E-24N01 M	1030.0	4-01-64	12.8	1017.2	5100
27S/13E-32B01 M	1103.5	4-01-64	51.7	1051.8	5100
27S/15E-10R02 M	1130.0	4-02-64	57.4	1072.6	5100
27S/15E-13A01 M	1153.5	4-02-64	21.0	1132.5	5100
27S/16E-21E02 M	1253.0	4-02-64	56.8	1196.2	5100
28S/12E-10G01 M	825.0	4-03-64	12.7	811.3	5100
28S/12E-10R02 M	805.0	3-29-64	10.1	794.9	5100
28S/12E-13N01 M	850.3	4-01-64	9.6	840.7	5100

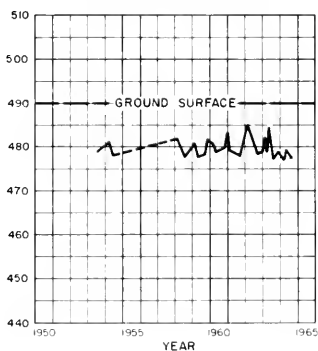
STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE TO SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SURVEYING DATA
CENTRAL COASTAL REGION					
PASO ROBLES					
3-04.06					
28S/13E-04K01 M	1199.5	4-01-64	64.7	1134.8	5100
28S/13E-04K02 M	1195.0	4-01-64	78.8	1116.2	5100
28S/14E-07E01 M	1150.0	4-02-64	14.0	1136.0	5100
28S/16E-23M01 M	1439.0	4-02-64	38.0	1401.0	5100
29S/13E-05F03 M	915.6	3-30-64	16.6	899.0	5100
29S/13E-05K02 M	928.5	3-30-64	13.3	915.2	5100
29S/13E-06A01 M	920.0	3-30-64	52.3	867.7	5100
29S/13E-19H01 M	1002.5	3-30-64	5.9	996.6	5100
CARMEL VALLEY					
3-07.00					
16S/01E-25B01 M	140.0	7-00-63	□	124.1	5100
		8-16-63	15.9	123.8	
		9-17-63	16.2	124.0	
		10-15-63	16.0	124.1	
		11-18-63	15.9	124.6	
		12-08-63	15.6	124.4	
		1-22-64	15.4	124.6	
		2-19-64	15.2	124.8	
		3-16-64	15.5	124.5	
		4-13-64	15.4	124.6	
		5-18-64	15.5	124.5	
		6-17-64	15.9	124.1	
WEST SANTA CRUZ TERRACE					
3-26.00					
11S/02W-22K01 M	30.0	11-13-63	79.3	- 49.3	5050
		3-18-64	66.6	- 36.6	

FIGURE C1 **FLUCTUATION OF WATER LEVEL** **IN WELLS** **NORTH COASTAL REGION**

UKIAH VALLEY (I-15.00)
MENDOCINO COUNTY
WELL 15N/12W-8LI, MDB &M
GROUND SURFACE ELEVATION 665'



SANEL VALLEY (I-16.00)
MENDOCINO COUNTY
WELL 13N/11W-18EI, MDB &M
GROUND SURFACE ELEVATION 490'



----- CONNECTS MEASUREMENTS MADE AT INTERVALS
 OF A YEAR OR MORE

SANTA ROSA VALLEY, SONOMA COUNTY (I-18.00)
SANTA ROSA AREA (I-18.01)
WELL 6N/BW-13RI, MDB &M
GROUND SURFACE ELEVATION 115'

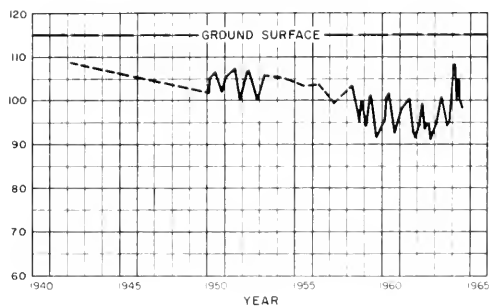
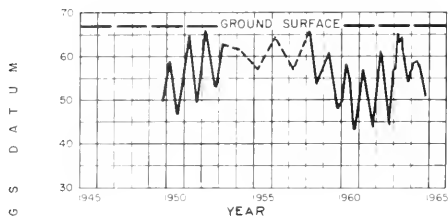
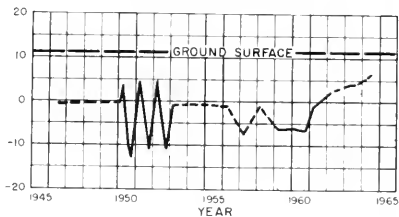


FIGURE C1 FLUCTUATION OF WATER LEVEL IN WELLS SAN FRANCISCO BAY REGION

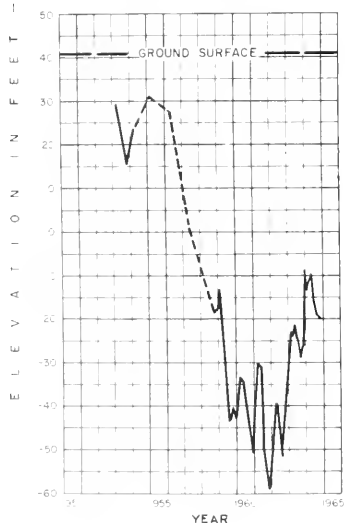
NAPA VALLEY (2-2.01)
NAPA COUNTY
WELL 6N/4A-17A1, MDB & M
GROUND SURFACE ELEVAT ON 87'



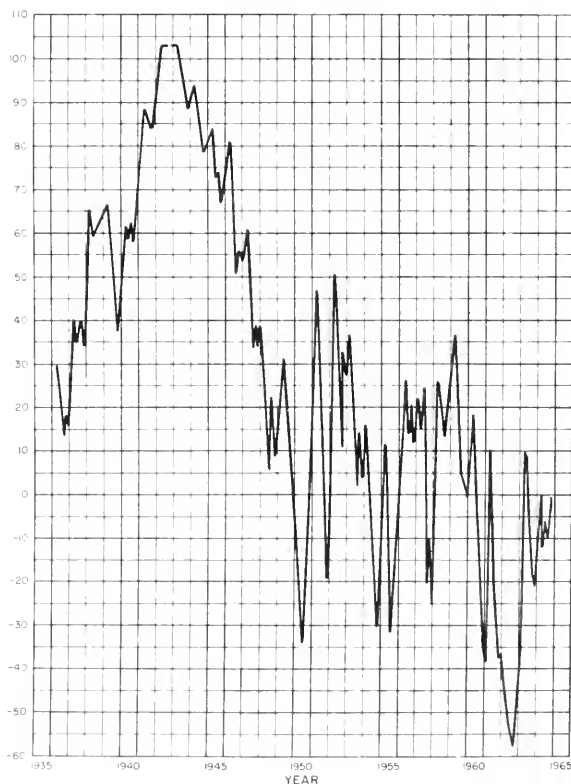
SONOMA VALLEY (2-2.02)
SONOMA COUNTY
WELL 5N/5W-28N1, MDB & M
GROUND SURFACE ELEVATION 11'



PETALUMA VALLEY (2-100)
SONOMA COUNTY
WELL 5N/7W-20B2, MDB & M
GROUND SURFACE ELEVATION 4'



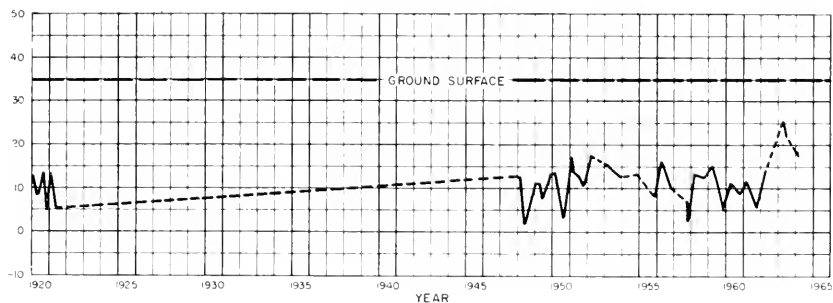
SANTA CLARA VALLEY (2-9.00)
NORTH SANTA CLARA COUNTY (2-9.02)
WELL 7S/1E-31A2, MDB & M
GROUND SURFACE ELEVATION 153'



----- CONNECTS MEASUREMENTS MADE AT
INTERVALS OF A YEAR OR MORE

FIGURE C1 **FLUCTUATION OF WATER LEVEL** **IN WELLS** **SAN FRANCISCO BAY REGION**

SUISUN-FAIRFIELD VALLEY (2-300)
 SOLANO COUNTY
 WELL 4N/2W-6A1, MDB 8 M
 GROUND SURFACE ELEVATION 35



----- CONNECTS MEASUREMENTS MADE AT
 INTERVALS OF A YEAR OR MORE

SANTA CLARA VALLEY (2-900)
 SOUTH ALAMEDA COUNTY (2-901) UPPER AQUIFER
 WELL 4S/1W-29C4, MDB 8 M
 GROUND SURFACE ELEVATION 55

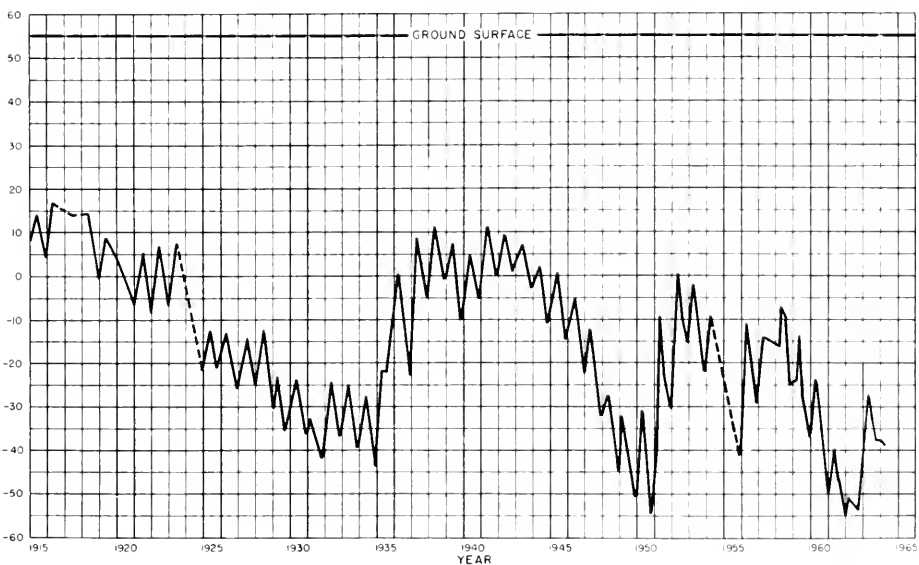
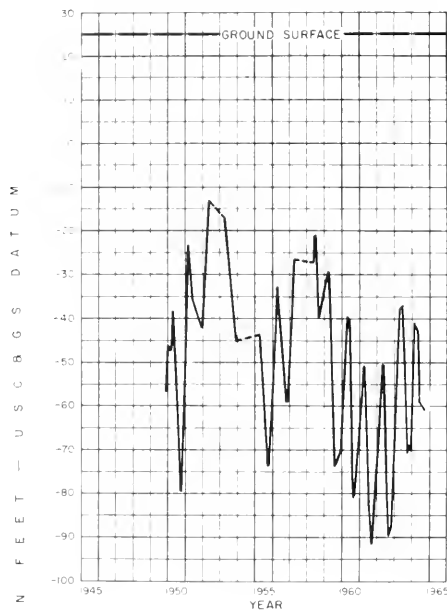
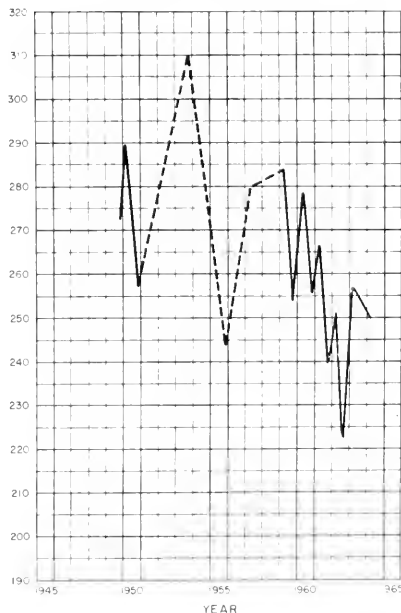


FIGURE C1 FLUCTUATION OF WATER LEVEL IN WELLS SAN FRANCISCO BAY REGION

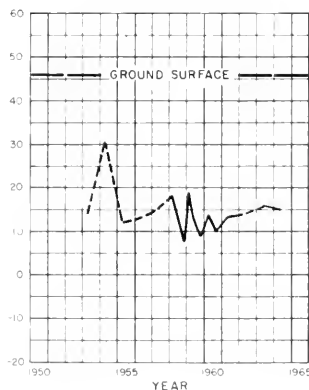
SANTA CLARA VALLEY (2-900)
SOUTH ALAMEDA COUNTY (2-901) LOWER AQUIFER
WELL 4S/2W-36KI, M D B & M
GROUND SURFACE ELEVATION 25



LIVERMORE VALLEY (2-1000)
ALAMEDA COUNTY
WELL 3S/1E-11HI, M D B & M
GROUND SURFACE ELEVATION 375



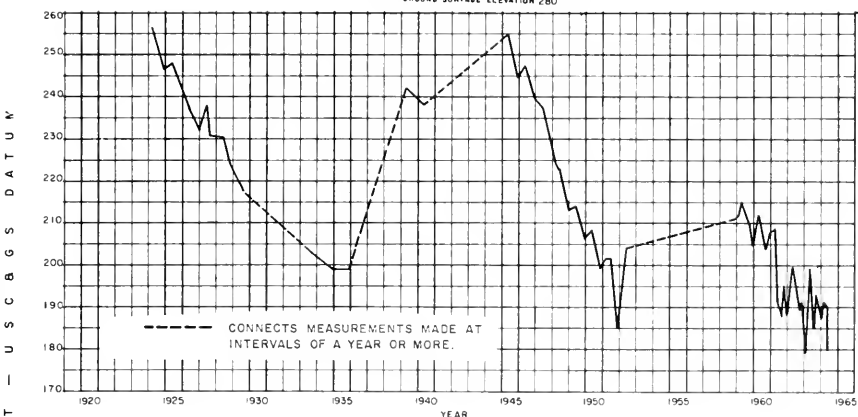
HALF MOON BAY TERRACE (2-2200)
SAN MATEO COUNTY
WELL 5S/5W-29NI, M D B & M
GROUND SURFACE ELEVATION 46



----- CONNECTS MEASUREMENTS
MADE AT INTERVALS OF
A YEAR OR MORE

FIGURE C1
FLUCTUATION OF WATER LEVEL
IN WELLS
CENTRAL COASTAL REGION

GILROY-HOLLISTER VALLEY (3-3.00)
 SAN BENITO COUNTY (3-3.02)
 WELL 12S/5E-33A1, M D B & M
 GROUND SURFACE ELEVATION 280'



GILROY-HOLLISTER VALLEY (3-3.00)
 SOUTH SANTA CLARA VALLEY (3-3.01)
 WELL 9S/3E-27C2, M D B & M
 GROUND SURFACE ELEVATION 347'

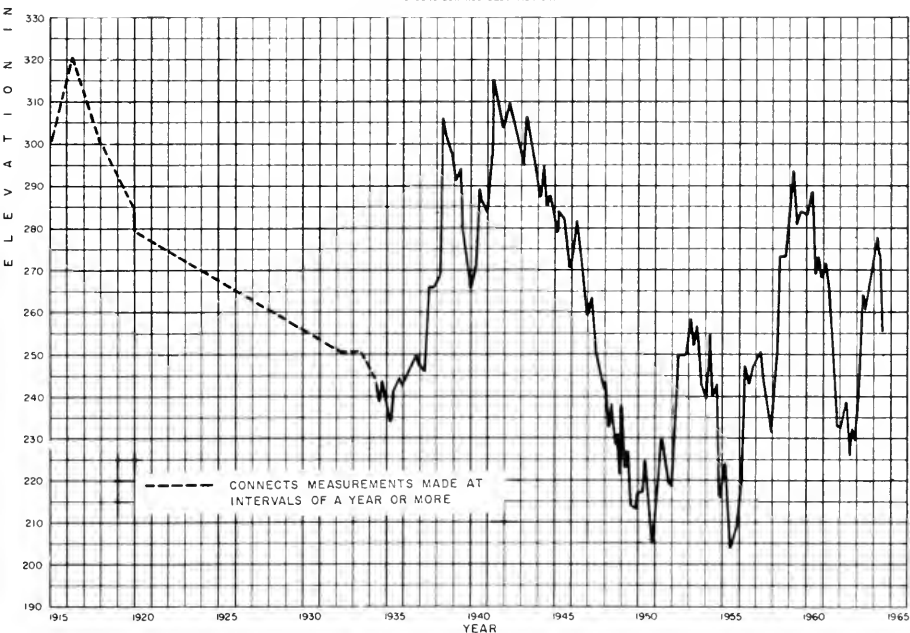
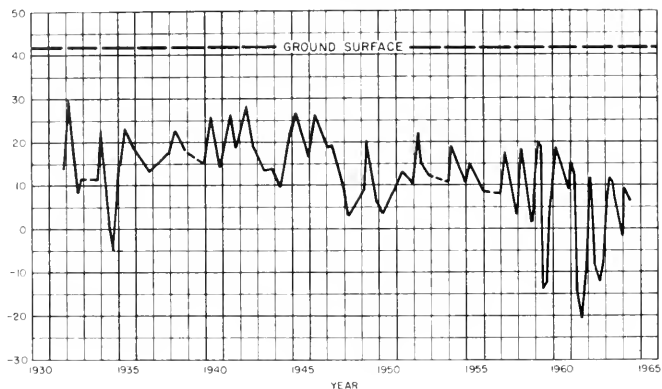


FIGURE C1 FLUCTUATION OF WATER LEVEL IN WELLS CENTRAL COASTAL REGION

SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
PRESSURE AREA - 180 FOOT AQUIFER (3-4.01)
WELL 15S/2E-1Q1, M DB & M
GROUND SURFACE ELEVATION 42'



SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
PRESSURE AREA - 400 FOOT AQUIFER (3-4.01)
WELL 14S/3E-1B1, M DB & M
GROUND SURFACE ELEVATION 71'

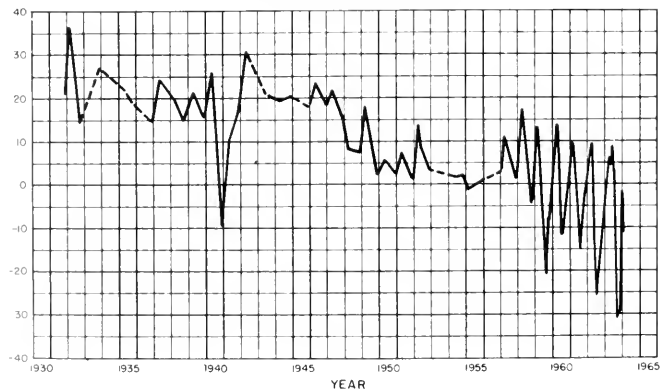
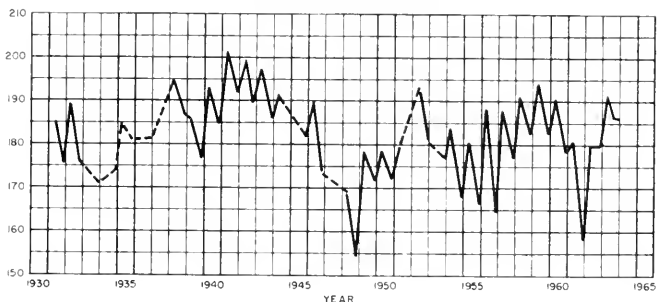


FIGURE C1
FLUCTUATION OF WATER LEVEL
IN WELLS
CENTRAL COASTAL REGION

SALINAS VALLEY, MONTEREY COUNTY (3-4 00)
ARROYO SECO CONE (3-4 04)
WELL 185/6E-15MI, M D B 8M
GROUND SURFACE ELEVATION 277



----- CONNECTS MEASUREMENTS MADE AT
INTERVALS OF A YEAR OR MORE

SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
EAST SIDE AREA (3-4 02)
WELL 16S/SE-17RI, M D B 8M
GROUND SURFACE ELEVATION 180

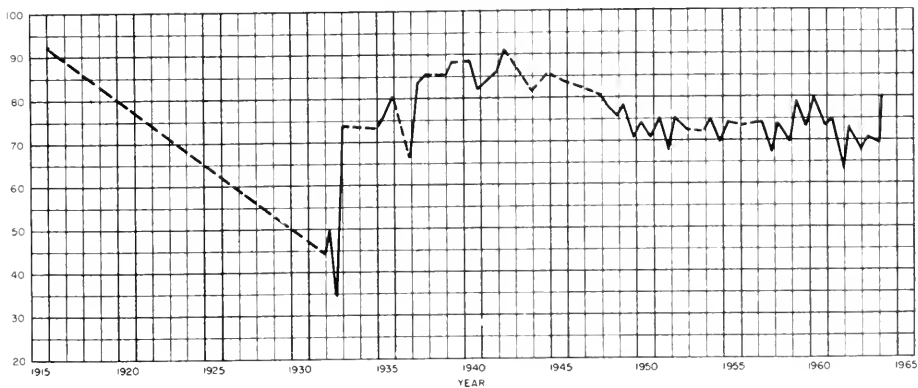
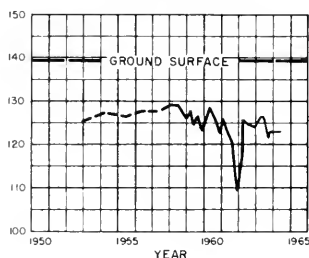


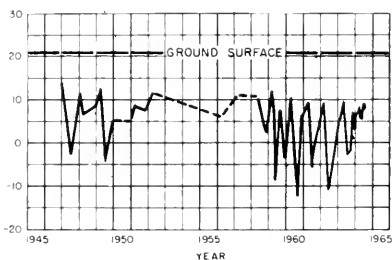
FIGURE C1 FLUCTUATION OF WATER LEVEL IN WELLS CENTRAL COASTAL REGION

CARMEL VALLEY (3-7.00)
MONTEREY COUNTY
WELL 16S/1E-25B1, M.D.B. & M.
GROUND SURFACE ELEVATION 139'

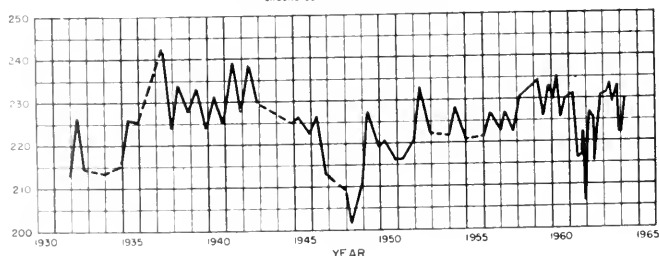


--- CONNECTS MEASUREMENTS MADE AT
INTERVALS OF A YEAR OR MORE

PAJARO VALLEY (3-2.00)
MONTEREY COUNTY
WELL 12S/2E-16J1, M.D.B. & M.
GROUND SURFACE ELEVATION 21'



SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
UPPER VALLEY AREA (3-4.05)
WELL 19S/7E-10P1, M.D.B. & M.
GROUND SURFACE ELEVATION 315'



APPENDIX D

SURFACE WATER QUALITY



ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

Federal

United States Geological Survey

State

California Department of Public Health

INTRODUCTION

This appendix contains data pertaining to the quality of surface waters in the Central Coastal Area. The data presented are the observed physical, chemical, bacteriological, and radiological characteristics of surface waters sampled during the 1964 water year, which covers the period from October 1, 1963 through September 30, 1964.

Laboratory Methods and Procedures

Methods of mineral and bacterial analysis, in general, are those described in the American Public Health Association publication, "Standard Methods for the Examination of Water and Sewage", 11th Edition, 1960. In some cases, the methods described in U. S. Geological Survey, "Methods for Collection and Analysis of Water Samples", Water Supply Paper 1454, 1960, have been employed.

Types of analyses normally made of surface water samples collected by the Department are mineral, bacterial, radiological, and trace element.

Sampling Station Data and Index

Table D-1, "Sampling Station Data and Index", is an alphabetic listing of stations from which surface water samples were collected. The analyses of these samples are reported in subsequent tables. The station number is an arbitrary number that has been assigned to each station. The location pertains to either the township, range, and section of the Public Land Survey or to latitude and longitude. The stations are classified into monitoring, investigational, and operational types.

Analyses of Surface Water

Table D-2, "Analyses of Surface Water", includes physical characteristics of the water and results of mineral and bacterial analyses. The data are presented in numerical order by Water Quality Control Board regions, and in a north to south order of streams within a region. At the time the samples were collected for laboratory examination, field determinations were made for dissolved oxygen (DO) by the modified Winkler method, water temperature, and pH. Visual inspections were made of the streams and the physical conditions were noted. This information is kept on file with the Department.

Samples collected for bacterial examination were delivered to the laboratory as quickly as possible. Results of bacterial determinations presented in this appendix should be considered as qualitative and quantitative indicators. Undue weight should not be given to the values for quantitative purposes.

Data from operational stations are shown separately at the end of the table. These data consist of analyses of South Bay Aqueduct water.

Summary of Coliform Analyses

Coliform data included in Table D-2 are made more usable by summarizing the results of the analyses of the 24 samples collected at each station during the year. Table D-3 is a summary of these analyses.

Spectrographic Analyses of Surface Water

Spectrographic analyses were made to determine the concentration of 17 different metals in surface water samples. Most of these metals are present in very small amounts and are often called trace metals. The concentrations indicated in Table D-4 are in parts per billion instead of parts per million

which is commonly used in reference to concentrations of mineral constituents. The symbols included with the constituent quantities are:

< Less than the amount indicated.

\leq Equal to or slightly less than the amount indicated.

Radioassays of Surface Water

Table D-5, "Radioassays of Surface Water", presents the radioactivity of surface water samples collected at 24 monitoring stations. The samples were collected in May and September at the same time that samples were collected for standard mineral analyses shown on Table D-2. The methods and procedures of sample preparation and determination of radioactivity in surface water are described in "Standard Methods for the Examination of Water and Sewage, 11th Edition".

Results are expressed as pico curies per liter (pc/l). The term pico curies is also written micro-micro curies and is further defined as 10^{-12} curies. Four values are reported for each sample: (a) alpha activity in the filtrate (dissolved material), (b) alpha activity in the solids retained on the filter (suspended material), (c) beta activity in the filtrate, and (d) beta activity in the solids. Sample counts are corrected for background and geometric efficiency. Dissolved material is designated by "Diss." in the table. Standard statistical procedures are utilized to compute the 0.9 error. The final result is expressed (symbolically) as $x \pm y$ pc/l. This means that in a series of determinations on the same sample, the value of x should fall between $x - y$ and $x + y$ 90 percent of the time.

Salinity Observations at Bay and Delta Stations

Table D-6 describes the seven stations for which salinity data are listed in Table D-7 and includes maximum observed salinity at bay and delta

tations. Table D-7 presents chloride concentrations of samples collected at eleven stations between Sobrante Beach and Collinsville for the period October 1, 1963 through June 30, 1964.

Electrical Conductance

Data from two electrical conductivity recorders are presented in figures D-1 and D-2. These data are machine prepared graphs. Daily mean values are plotted in Figure D-1 and single daily reading at 1300 hours are plotted in Figure D-2. Each figure or graph presents the data from a station.

TABLE D-1
SAMPLING STATION DATA AND INDEX

Station	Station Number	Location ^a	Beginning of Record	Station Type ^c	Sampled By ^d	Analysis on page
ALAMEDA CREEK NEAR NILES	73	4S/1W-15	Dec. 1951	M	DWR	116
ALAMEDA CREEK NEAR NILES	73	4S/1W-15	Dec. 1959	M	USGS	114
ALBA CREEK	245	9S/2W-32	Oct. 1963	I	DWR	134
ALTAMONT CREEK AT ALTAMONT TURNOUT OF SOUTH BAY AQUEDUCT	201	2S/3E-31	June 1962	O	DWR	113
ARROYO DEL VALLE NEAR LIVERMORE	71	4S/2E-4	July 1958	M	DWR	117
BEAN CREEK ONE MILE EAST OF FELTON	204	10S/2W-22	Aug. 1963	I	DWR	143
BEAR CREEK AT BOULDER CREEK	205	9S/2W-30	Aug. 1963	I	DWR	132
BEAR CREEK FOUR MILES NORTHEAST OF BOULDER CREEK	206	9S/2W-10	Aug. 1963	I	DWR	129
BETHANY FOREBAY AT SOUTH BAY PUMPING PLANT	207	2S/3E-10	Apr. 1962	O	DWR	163
BIG RIVER NEAR MOUTH	8c	17N/17W-24	Jan. 1959	M	DWR	105
BLANCO DRAIN INTO SALINAS RIVER	246	14S/2E-16	Aug. 1964	I	DWR	153
BOULDER CREEK AT BOULDER CREEK	208	9S/2W-30	Aug. 1963	I	DWR	133
BOULDER CREEK	247	9S/3W-14	Oct. 1963	I	DWR	136
BRANCIPORTE CREEK NEAR SANTA CRUZ	209	11S/1W-7	Nov. 1963	I	DWR	147
BRANCIPORTE CREEK	248	11S/1W-7	Aug. 1963	I	DWR	148
BUTANO CREEK	249	8S/5W-14	Sept. 1963	I	DWR	123
BUTANO CREEK	250	8S/5W-25	Apr. 1964	I	DWR	124
CARBONERA CREEK	251	11S/1W-7	Jan. 1964	I	DWR	149
CARMEL RIVER AT ROBLES DEL RIO	83	17S/2E-2	Jan. 1952	M	DWR	158
CLEAR CREEK AT BROOKDALE	210	9S/2W-32	Aug. 1963	I	DWR	135
COLLINSVILLE	236	38°04' Lat ^b 121° 51' Long	1924	M	DWR	171
COYOTE CREEK NEAR MADRONE	82	9S/3E-9	Jan. 1952	M	DWR	124
CROCKETT	237	38°03' Lat ^b 122°13' Long	1946	M	DWR	171
DENNISTON CREEK	252	5S/6W-2	Sept. 1963	I	DWR	118
FALL CREEK ONE-HALF MILE NORTH OF FELTON	211	10S/2W-16	Aug. 1963	I	DWR	142
GAZOS CREEK	253	9S/5W-11	Sept. 1963	I	DWR	125
GUALALA RIVER, SOUTH FORK, NEAR ANNAPOLIS	9a	10N/14W	Jan. 1959	M	DWR	107
KINGS CREEK TWO MILES NORTH OF BOULDER CREEK	213	9S/2W-18	Aug. 1963	I	DWR	130
LIVERMORE CANAL AT PATTERSON RESERVOIR	214	3S/3E-6	Aug. 1962	O	DWR	164
LONFICO CREEK ONE MILE NORTH OF OLYMPIA	215	10S/2W-11	Aug. 1963	I	DWR	141
LOS GATOS CREEK NEAR LOS GATOS	74	8S/1W-29	Dec. 1951	M	DWR	121
LOVE CREEK AT BEN LOMOND	216	10S/2W-4	Aug. 1963	I	DWR	139
MARTINEZ	239	38°02' Lat ^b 122°08' Long	1926	M	DWR	171
MARSHALL CREEK	254	10S/2W-5	Oct. 1963	I	DWR	140
MIDDLE POINT	255	38°03' Lat ^b 121°59' Long	Jan. 1964	M	DWR	171
NACIMIENTO RIVER NEAR SAN MIGUEL	43b	25S/11E-4	July 1958	M	DWR	161
NAPA RIVER NEAR ST. HELENA	72	8N/5W-33	Dec. 1951	M	DWR	112

a Locations are referenced to Mt. Diablo Base and Meridian.

b Locations given in latitude and longitude because the areas have not been surveyed for township, range, and section.

c M-Monitoring, I-Investigational, O-Operational.

d DWR-Department of Water Resources, USGS-United States Geological Survey

TABLE D-1
SAMPLING STATION DATA AND INDEX

Station	Station Number	Location ^a	Beginning of Record	Station Type ^c	Sampled By ^d	Analysis on page
VARRO RIVER NEAR NAVARRO	8b	15N/16W-7	Jan. 1959	M	DWR	106
WELL CREEK ONE MILE NORTHEAST OF BEN LOMOND	219	10S/2W-3	Aug. 1963	I	DWR	139
YO RIVER NEAR FORI BRAGG	10c	18N/17W-10	Jan. 1959	M	DWR	104
VARO RIVER NEAR CHITTENDEN	77	12S/3E-12	Dec. 1951	M	DWR	152
SCADERO CREEK	256	8S/4W-5	Sept. 1963	I	DWR	122
TSBURG	240	38°02' Lat ^b 121°53' Long	1945	M	DWR	171
ORT CHICAGO	241	38°04' Lat ^b 122°02' Long	1946	M	DWR	171
URISIMA CREEK	257	6S/5W-2	Sept. 1963	I	DWR	119
URISIMA CREEK	258	6S/5W-21	Feb. 1964	I	DWR	120
SSIAN RIVER, EAST FORK, AT POTTER VALLEY POWERHOUSE	10a	17N/11W-6	May 1951	M	DWR	111
SSIAN RIVER AT GUERNEVILLE	10	8N/10W-32	Apr. 1951	M	DWR	108
SSIAN RIVER NEAR HEALDSBURG	9	9N/9W-22	Apr. 1951	M	DWR	109
SSIAN RIVER NEAR HOPLAND	8a	14N/12W-36	Apr. 1951	M	DWR	110
LINAS RIVER NEAR BRADLEY	43c	23S/10E-15	July 1958	M	DWR	154
LINAS RIVER AT PASO ROBLES	43a	26S/12E-28	Apr. 1951	M	DWR	162
LINAS RIVER NEAR SPRECKELS	43	15S/3E-18	Apr. 1951	M	DWR	156
LINAS RIVER, MILE 9.51	259	15S/2E-2	Aug. 1964	I	DWR	155
LINAS RIVER, MILE 7.13	260	14S/2E-33	Aug. 1964	I	DWR	155
LINAS RIVER, MILE 4.65	261	14S/2E-16	Aug. 1964	I	DWR	154
LINAS RIVER, MILE 3.50	262	14S/2E-16	Aug. 1964	I	DWR	154
LINAS RIVER, MILE 1.70	263	14S/2E-7	Aug. 1964	I	DWR	153
LINAS RIVER, MILE 0.00	264	14S/1E-1	Aug. 1964	I	DWR	153
N ANTONIO RIVER NEAR PLEYTO	43d	24S/9E-3	July 1958	M	DWR	160
N BENITO RIVER NEAR BEAR VALLEY FIRE STATION	77a	15S/7E-28	July 1958	M	DWR	157
N GREGORIO CREEK	265	7S/5W-15	Sept. 1963	I	DWR	120
N LORENZO RIVER AT BIG TREES	226	10S/2W-27	Aug. 1963	I	DWR	146
N LORENZO RIVER AT BIG TREES NEAR FELTON	75	10S/2W-27	Dec. 1951	M	DWR	146
N LORENZO RIVER AT BOULDER CREEK	227	9S/2W-30	Aug. 1963	I	DWR	134
N LORENZO RIVER SIX MILES NORTH OF BOULDER CREEK	228	8S/3W-25	Aug. 1963	I	DWR	128
N LORENZO RIVER AT FELTON	229	10S/2W-22	Aug. 1963	I	DWR	144
N LORENZO RIVER AT SANTA CRUZ	230	11S/2W-12	Aug. 1963	I	DWR	151
QUEL CREEK AT SOQUEL	76	11S/1W-10	Dec. 1951	M	DWR	150
MOONBILL CREEK	243	38°04' Lat ^b 121°54' Long	1957	M	DWR	171
MO BAR CREEK ONE MILE NORTH OF BOULDER CREEK	232	9S/2W-19	Aug. 1963	I	DWR	131
AS CREEK NEAR MORGAN HILL	96	10S/3E-17	July 1952	M	DWR	137
ITEHOUSE CREEK	266	9S/5W-13	Sept. 1963	I	DWR	126
YANTE CREEK AT FELTON	233	10S/2W-22	Aug. 1963	I	DWR	145
YANTE CREEK AT ZAYANTE	234	10S/2W-2	Aug. 1963	I	DWR	138

Locations are referenced to Mt. Diablo Base and Meridian.

Locations given in latitude and longitude because the areas have not been surveyed for township, range, and section.

M-Monitoring, I-Investigational, O-Operational.

DWR-Department of Water Resources, USGS-United States Geological Survey

NORTH COASTAL REGION (NO, 1)

Field 04

Sum of calcium and magnesium in ppm.

Iron (Fe), aluminum (Al), arsenic (As),

Determined by addition of analyzed constituents

GRAVIMETRIC DETERMINATION

Mineral analyses made by United States Geological Survey

Public Health (LBDPH); Terminal Testing Labor

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen in ppm	Specific Conductance at 25°C in µmhos	Mineral constituents in equivalents per million												Total dissolved solids in ppm	Hardness as CaCO ₃ Total in ppm	Turbidity in NTU	Coliforms MPN/ml	Analyzed by		
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)						Other constituents	
BIG RIVER NEAR MOUTH (STA. Bc)																							
10-9-63 1120	6 est.	61	7.8	80	222	7.8	1.76 ^c	0.52	12	0	121	0.00 ^c	9.8 0.28			0.2		23	88	0	1	USGS	
11-14-63 1545	1000 est.	56	10.0	100	155	7.5	1.22 ^c	0.36	8.3	0	76	0.00 ^c	6.3 0.18			0.2		23	61	0	65		
12-11-63 0945	90 est.	44	11.7	90	179	6.8	1.42 ^c	0.41	9.4	0.00	90	0.00	7.0 0.20			0.2		22	71	0	5		
1-9-64 1415	75 est.	46	11.8	99	177	7.0	1.44 ^c	0.43	9.9	0.00	97	0.00	7.8 0.22			0.2		23	72	0	10		
2-6-64 1700	147.8	48	11.8	102	156	7.2	1.22 ^c	0.37	8.6	0.00	79	0.00	6.5 0.18			0.1		23	61	0	2		
3-12-64 1520	277	46	11.7	98	140	7.5	1.10 ^c	0.36	8.3	0	89	0.00	5.8 0.16			0.2		25	55	0	170		
4-18-64 1500	51	58	10.3	101	193	7.6	1.56 ^c	0.48	11	0.00	100	0.00	7.0 0.20			0.2		24	78	0	1		
5-13-64 1310	29.5	64	9.8	104	205	7.5	22 1.10	6.6 0.54	11.2 0.48	0	109	0.00	8.0 0.17	0.2 0.00	0.1 0.01	0.2	As = 0.00 ABS = 0.0 PO ₄ = 0.00	128	22	82	0		15
6-4-64 1250	19.6	64	9.3	98	216	7.5	1.72 ^c	0.52	12	0.00	117	0.00	6.5 0.18			0.2		23	83	0	1		
7-18-64 1255	10 est.	70	9.3	105	223	7.7	1.74 ^c	0.57	13	0.00	120	0.00	7.1 0.20			0.4		25	87	0	1		
8-12-64 1105	86	8.9	96	223	242	7.5	1.74 ^c	0.61	14	0.00	124	0.00	7.0 0.20			0.4	As = 0.00 ABS = 0.1 PO ₄ = 0.05	26	87	0	1		
9-3-64 1315	8.8	64	9.6	102	224	7.3	22 1.10	7.8 0.64	13 0.57	0.00	122	0.00	7.3 0.21	0.4 0.01	0.4	0.4		129	24	87	0	2	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in ppm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs. TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); Unretained Deposits of the Survey, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); Metropolitan Water District of Southern California (MWD); Orange County Water District (OCWD); Orange County Flood Control District (OCFCD); Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Teminal Training Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

300-004 0-01 200 300

TABLE D-2
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date and time of day P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Specific Conductance (microhm/cm at 25°C)	pH	Mineral constituents in equivalents per million											Total dissolved solids in ppm	Per cent solids in ppm	Hardness on CaCO ₃ Total ppm	Temp. in °F	Coliform MPN/100 ml	Analyzed by
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)						
10-4-63 1237	24	64	8.6	90	265	7.3	7.8	12	0	150	2.46	0	11	0.11	0.0	0.0	19	113	0	1	5.0	USGS
11-1-63 1765	1,000	57	9.5	91	193	7.6	7.3	9.7	0	88	0.00	0	7.5	0.11	0.00	0.1	21	77	5	300	230	
12-11-63 1100	155	46	10.5	96	232	7.1	7.9	11	0	119	0.00	0	9.0	0.25	0.00	0.2	20	96	0	3	6.2	
1-10-64 1030	142	46	11.5	96	242	6.9	7.9	13	0	125	0.00	0	9.0	0.25	0.00	0.1	22	101	0	3	6.2	
2-7-64 1125	285	47	11.6	98	210	8.0	7.1	10	0	110	1.75	0	7.0	0.20	0.00	0.1	20	86	0	4	23	
3-13-64 1050	180	47	11.3	96	197	7.9	7.3	10	0	95	0.00	0	7.2	0.20	0.00	0.1	22	80	2	20	23	
4-17-64 1100	80	56	10.1	96	249	7.6	8.4	12	0.07	128	0.00	0	8.5	0.24	0.00	0.1	20	105	0	1	62	
5-16-64 0910	50	58	9.5	92	259	8.1	7.5	10	0.03	138	0.00	0	9.5	0.27	0.00	0.1	16	110	0	1	1.3	
6-5-64 0940	36	63	9.1	94	265	7.3	7.3	13	0.57	141	0.00	0	8.5	0.24	0.00	0.2	21	110	0	1	62	
7-16-64 1400	12	74	10.3	119	269	7.6	7.8	13	0.57	164	0.00	0	8.6	0.24	0.00	0.2	20	111	0	1	.50	
8-13-64 0845	7.1	65	6.9	73	270	7.3	7.3	14	0.61	166	0.00	0	7.5	0.21	0.00	0.3	21	112	0	3	2.3	
9-4-64 1045	9.3	62	7.8	80	269	7.2	7.2	14	0.61	167	0.00	0	8.1	0.23	0.00	0.2	21	113	0	1	620	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

3205-244 6-63 30

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Specific conductance at 25°C	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Percent total solids in ppm	Hardness as CaCO ₃ in ppm	Tur- bid- ity in ppm	Analyzed by		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbon- dioxide (CO ₂)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Other constituents					
GUALALA RIVER, SOUTH FORK, NEAR ANNAPOLIS (STA. 99)																						
10-9-63	17	68	10.3	112	7.8			13		0	154		11			0.0		19	118	0	62	
14-5				277	6.9		2.365	6.57		0.00	2.52		0.31									
11-14-63					7.5			5.5		0	59		3.8			0.1		19	50	2	230	
2000	4,100	56	10.1	96	7.2		1.008	0.24		0.00	0.97		0.11									
12-11-63	120	47	11.3	95	7.3		1.845	8.2		0.00	1.14		8.6			0.0		18	92	0	2.3	
13-45				217	6.0			11		5	125		8.1			0.0		19	101	0	6.2	
1-10-64	103	45	12.3	101	7.2		2.025	0.48		0.17	2.05		0.23									
2-7-64	186	48	12.0	103	7.5		1.805	0.41		0.00	1.74		6.5			0.0		19	90	3	6.2	
1410				201	8.2			9.4		0.00	0.18		0.18									
3-13-64	250	50	11.3	100	7.6		1.665	8.4		0.00	1.59		6.0			0.1		20	83	3	2.1	
1205				199	8.0			12		0.13	2.10		2.3					19	108	0	1.3	
4-17-64	43	61	10.0	101	7.6		2.165	0.52		1.0	0	134	8.0	0.4	0.2	0.1						
13-45				252	6.3			11		0.03	0.48		0.23	0.01	0.01							
5-14-64	28	63	10.9	112	7.8		1.30	0.90		0.00	2.20		0.29					18	110	0	2.3	
1110				258	7.9			13		0.00	2.23		6.5			0.1						
6-5-64	36	66	11.3	120	8.1		2.165	0.57		0.00	2.23		6.5					21	108	0	1.3	
1145				257	8.0			13		0.00	2.23		6.5									
7-16-64	6.9	72	9.3	106	7.8		2.38	0.57		3	144		2.5			0.1		19	119	0	2.1	
13-45				277	6.3			13		0.10	2.36		0.21									
8-13-64	3.4	72	9.5	108	7.9		2.305	0.57		0.00	2.39		2.5			0.2		20	115	0	6.2	
1100				272	8.1			13		0.00	2.39		0.21									
9-4-64	3.1	68	8.9	97	7.5		2.5	29		1.1	13		2.5	0.6		0.1		19	119	0	0.2	
1330				277	8.0		1.45	0.53		0.03	0.00	2.51	0.21	0.01								

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL) or California Department of Water Resources (DWR); as indicated.

3275-4-B 6-61 200 590

TABLE D-2

NORTH COASTAL REGION (NO. 1)

Field pH

b Laboratory pH.

c. Sum of calcium and magnesium in ppm.

d Iron (Fe), aluminum (Al), orsenic (As), cop

a Derived from conductivity vs TDS curves

(f) Determined by addition of analyzed constituents.

Gravimetric determination

* Actual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

All animal necropsies made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); and San Bernardino County Flood Control District (SBCFD).

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ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Specific conductance at 25°C μmhos/cm	Mineral constituents in equivalents per million											Total dissolved solids in ppm	Hardness as CaCO ₃ ppm	Total N.C. ppm	Total biogenic MPN/ml	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)					
10-11-63 0920	260	62	8.2	84	7.7	2.20	7.0	0.30	0	137	0.00	6.9	0.19	0.2		12	110	0	62.	USGS
11-13-63 1410	605	59	9.8	97	7.8	2.22	7.4	0.32	0	133	0.00	6.8	0.19	0.4		13	111	2	62.	
12-13-63	418	47	11.8	99	7.2	2.74	9.2	0.40	0	162	0.00	7.0	0.20	0.4		13	137	4	6.2	
1-8-64 1215	1,560	50	11.9	105	7.3	1.72	7.3	0.32	0	102	0.00	5.0	0.14	0.3		16	86	0	30	
2-5-64 1330	800	54	10.8	100	7.9	2.48	8.8	0.38	0	146	0.00	4.5	0.13	0.3		13	124	4	10	
3-11-64 1530	544	51	11.4	102	8.0	2.36	8.5	0.37	0	140	0.00	5.5	0.16	0.3		14	118	3	23.	
4-15-64 1210	313	69	10.9	120	8.2	2.72	9.5	0.41	2	158	0.07	6.5	0.18	0.4		13	136	3	2	
5-12-64 1130	166	68	9.5	103	7.9	1.65	9.2	0.40	0	171	0.00	8.5	1.0	0.2	As = 0.00 ABS = 0.0 Pb = 0.00	12	144	4	1	
6-3-64	150	70	9.7	108	8.4	2.88	7.4	0.32	2	168	0.07	8.0	0.23	0.5		10	144	3	1	
7-15-64 1045	195	78	8.7	105	7.8	2.48	8.8	0.38	0	140	0.00	4.4	0.12	0.5		13	124	3	2	
8-11-64 1200	182	74	8.7	101	8.2	2.38	9.1	0.40	0	148	0.00	4.5	0.13	0.6		14	119	0	2	
9-2-64 1215	180	70	8.8	98	8.1	1.33	8.8	0.36	0	145	0.00	4.8	0.06	0.5	As = 0.00 Pb = 0.00	12	119	0	1	

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in ppm

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e. Derived from conductivity vs TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Annual median and range, respectively

i. Annual median and range, respectively

j. Annual median and range, respectively

k. Annual median and range, respectively

l. Annual median and range, respectively

m. Annual median and range, respectively

n. Annual median and range, respectively

o. Annual median and range, respectively

p. Annual median and range, respectively

q. Annual median and range, respectively

r. Annual median and range, respectively

s. Annual median and range, respectively

t. Annual median and range, respectively

Analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

3255-6-64 6-64 230 290

TABLE D-2
ANALYSES OF SURFACE WATER
NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Specific conductance at 25°C µmhos/cm	pH	Mineral constituents in equivalents per million												Total dissolved solids in ppm	Per- cent solids in ppm	Hardness as CaCO ₃ Total ppm	Tur- bidity in ppm	Analyzed by
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)	Boron (B)	Silica (SiO ₂)	Other constituents					

RUSSIAN RIVER NEAR HOPLAND (STA. 84)																					
10-10-63 1325	236	62	9.2	96	7.9			5.6		0	1.00		4.9			0.1		13	81	0	2.3
11-13-63 1230	435	61	9.3	96	7.4			6.8		0	1.05		5.8			0.4		15	86	0	23.
12-13-63 1100	181	47	10.5	90	7.2			8.9		0	1.19		6.7			0.4		17	96	0	23.
1-8-64 1115	1,880	48	11.6	101	7.2			6.6		0	0.97		4.5			0.3		15	80	0	23.
2-5-64 1200	400	51	9.6	87	7.3			9.0		0	1.12		6.2			0.1		17	93	1	23.
3-11-64 1400	527	47	11.3	97	7.4			7.4		0	0.97		5.8			0.2		16	82	2	15
4-15-64 1445	158	63	11.0	116	7.6			8.7		0.03	1.15		7.0			0.3	As = 0.00 ABS = 0.1 PO₄ = 0.35	17	96	0	23.
5-12-64 0930	122	64	9.5	98	7.4			9.2		0	1.20		10.9			0.4		135	98	0	620.
6-3-64 0955	146	59	10.1	101	7.4			7.6		0	1.06		3.5			0.3		16	89	2	4
7-15-64 0900	219	65	9.8	105	7.4			7.2		0	1.02		3.0			0.3		15	86	2	4
8-11-64 1045	211	65	9.7	104	8.1			7.6		0	1.08		3.5			0.4	As = 0.00 ABS = 0.1 PO₄ = 0.05	16	88	0	1
9-2-64 1030	241	65	8.5	91	7.7			7.2		0	1.16		3.6			0.4		120	94	0	1

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE D-2
ANALYSES OF SURFACE WATER
SAN FRANCISCO BAY REGION (NO. 2)

Date and time of day and P.S.T.	Discharge Temp in °C	Dissolved oxygen ppm	Specific conductance (microhm/cm at 25°C)	Mineral constituents in equivalents per million												Total dissolved solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Temp. in °F	Conform to MPN/ml	Analyzed by
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)					
NAPA RIVER NEAR ST. HELENA (STA. 72)																				
10-11-63	4.0	64	4.1	43	7.0	19	0.83	0	180	0.00	2.1	0.59	0.3	0.3	21	152	4	2	7000.	USGS
1030					7.4				2.95										7000.	
11-13-63	7.0	64	7.5	79	308	25	1.09	0	117	0.00	24	0.68	0.7	0.7	35	100	4	8	130.	
12-13-63	18	47	8.1	73	238	18	0.78	0	90	0.00	14	0.39	0.4	0.4	34	76	2	5	62.	
1330					7.1				1.48										230.	
1-8-64	11	50	10.4	92	274	24	1.06	0	102	0.00	21	0.59	0.6	0.6	39	83	0	15	23.	
1355					7.0				1.07										23.	
2-5-64	48	54	9.3	87	208	14	0.61	0	87	0.00	12	0.34	0.1	0.1	30	72	1	10	62.	
1910					7.8				1.43										230.	
3-11-64	21	52	11.0	100	270	19	0.83	0	110	0.00	19	0.34	0.7	0.7	30	99	9	20	500.	
1720					7.5				1.80										62.	
4-15-64	9.1	73	9.8	114	315	24	1.04	0	121	0.00	25	0.71	0.8	0.8	35	97	0	1	62.	
1530					7.6				1.98										21.	
5-12-64	4.3	73	12.5	146	335	23	1.13	2.8	0.139	0.00	18	0.62	0.4	0.7	35	114	0	1	6.2	
1415					7.3			0.07	2.28	0.37					AS = 0.00 ABS = 0.1 H ₂ O ₄ = 0.25	212			6.2	
6-3-64	2.8	71	13.8	157	336	20	0.87	0	151	0.00	22	0.69	0.6	0.6	26	122	0	3	1.3	
1325					8.1				2.67										5.0	
7-15-64	0.2	75	6.5	77	372	20	0.87	0	189	0.00	16	0.45	0.4	0.4	23	149	0	3	23.	
1200					7.6				3.10										6.2	
8-11-64	0.6	69	0.6	67	388	21	0.91	0	208	0.00	11	0.31	0.4	0.4	22	163	0	3	230.	
1345					8.1				3.41										23.	
9-2-64	0.2	66	0.5	5	387	34	1.19	0	207	0.00	12	0.4	0.4	0.4	23	161	0	1	62.	
1415					6.9				3.39						AS = 0.01 ABS = 0.1 H ₂ O ₄ = 0.45	232			62.	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively

i Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

j Annual analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated

k Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (SFR, 2)

Date and time of day P.S.T.	Discharge in cfs in 24 hr.	Dissolved oxygen ppm	Specific conductance (microhms at 25°C)	Mineral constituents in parts per million												Total dissolved solids in ppm	Per cent solids in suspension	Hardness as CaCO ₃ Total in ppm	Turbidity in ppm	Conformity with state regulations	Analyzed by
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)						
ALAMONT CREEK AT ALAMONT THERMIST OF SOUTH BAY AQUEDUCT (STA. 201)																					
10-28-63	33.9		502		2.34c					38	75						ABS = 0.00			DNR	
1318										17.79	2.12						As = 0.00				
12-2-63										6.0	77						As = 0.00				
1430	16.9		526		2.38c					0.83	2.17						Cu = 0.00				
																	Zn = 0.00				
1-6-64	48.6		569		2.34c					53	79						ABS = 0.00				
1430										1.70	2.23										
2-3-64			2610		6.31c	4.55				306	418						ABS = 0.00				
1440						19.79				6.37	11.79										
3-2-64	33.3		786		3.66c					104	122										
1615										2.16	3.44										
4-1-64	2.1		636		3.08c					65	91						ABS = 0.00				
1345										1.35	2.27										
5-1-64			1650		4.88c					91	252						ABS = 0.00				
1330										1.89	7.11										
6-1-64	51.3		408		2.710c					33	54						ABS = 0.00				
1700										0.69	1.52										
7-1-64	55.6		322		1.77c					24	35						ABS = 0.00				
1715										0.50	0.99										
8-1-64			381		1.77c					23	55						ABS = 0.00				
1435										0.48	1.35										
9-1-64	32.0		576		2.20c					32	107						ABS = 0.00				
1615										0.67	3.02										

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood

Control District (SBFCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of

Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

12/2/64 6-64 20 20

TABLE D-2
ANALYSES OF SURFACE WATER
SAN FRANCISCO BAY REGION (NO. 2)

Date and time of day PST	Decrease in cfs in 24 hr	Dissolved oxygen in %	Specific conductance at 25°C d	Mineral constituents in equivalents per million												Total dissolved solids in ppm	Percent solids in ppm	Hardness as CaCO ₃ Total N.C. in ppm	Total hardness as CaCO ₃ in ppm	Analyzed by
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Barium (Ba)	Silica (SiO ₂)					
ALAMEDA CREEK NEAR NILES (STA. 73)																				
10/1-10/63	25	674	36 1,770	22 1,778	67 2,771	6.4 0.11	0 0.00	128 2,792	31 1,706	92 2,680	6.0 0.06	0.3 0.02	0.4 0.4	2.0 0.4	Fe = 0.01 Color = 2	388 ^a	43	184	38	USGS
10/11-19/63	19	681	39 1,955	20 1,655	67 2,491	5.2 0.13	0 0.00	174 2,885	43 0.90	96 2,771	3.4 0.05	0.3 0.02	0.4 0.4	1.8 0.4	Fe = 0.01 Color = 6	378 ^a	44	180	37	
10/23-31/63	25	593	32 1,600	18 1,445	59 2,757	4.2 0.11	0 0.00	158 2,559	45 0.94	81 2,729	3.0 0.05	0.3 0.02	0.4 0.4	1.8 0.4	Fe = 0.01 Color = 2	348 ^a	45	152	22	
11/1-7/63	15	619	38 1,900	18 1,532	46 2,276	3.4 0.09	0 0.00	171 2,840	40 1,702	75 2,712	2.3 0.03	0.3 0.06	0.3 0.3	1.5 0.3	Fe = 0.01 Color = 5	358 ^a	43	171	31	
11/8-13/63	3	849	56 2,779	28 2,733	80 3,448	5.1 0.13	0 0.00	266 4,003	73 1,532	101 2,885	0.1 0.01	0.1 0.01	0.6 0.6	1.2 0.6	Fe = 0.00 Color = 10	499 ^a	40	256	54	
11/14-20/63	26	766	53 2,664	27 2,720	68 2,996	5.0 0.13	0 0.00	238 3,390	61 1,277	83 2,734	6.0 0.10	0.2 0.01	0.5 0.1	1.2 0.3	Fe = 0.00 Color = 15	450 ^a	37	242	47	
11/21-30/63	15	654	46 2,700	20 1,406	40 2,401	8.2 0.22	0 0.00	172 2,828	56 1,712	76 2,709	2.6 0.07	0.3 0.01	0.3 0.3	1.6 0.3	Fe = 0.04 Color = 30	390 ^a	40	183	42	
12/1-10/63	9	721	45 2,255	20 1,677	73 3,118	5.1 0.13	0 0.00	188 3,008	61 1,227	88 2,748	7.8 0.13	0.1 0.01	0.3 0.3	1.7 0.3	Fe = 0.01 Color = 15	428 ^a	44	196	42	
12/13-23/63	9	716	46 2,270	21 1,772	70 3,007	5.4 0.14	0 0.00	182 2,988	65 1,355	86 2,743	8.4 0.14	0.1 0.06	0.3 0.3	1.1 0.3	Fe = 0.01 Color = 10	412 ^a	43	196	47	
12/26-31/63	3	883	46 2,409	23 2,409	70 3,007	4.9 0.13	0 0.00	206 4,005	88 1,783	78 2,720	3.4 0.05	0.3 0.06	0.5 0.5	2.8 0.5	Fe = 0.00 Color = 10	508 ^a	34	294	61	
1/1-9/64	38	678	41 2,205	19 1,555	66 2,877	4.1 0.10	0 0.00	160 2,622	53 1,170	87 2,735	6.5 0.10	0.2 0.01	0.5 0.5	1.7 0.5	Fe = 0.01 Color = 5	402 ^a	44	180	49	
1/10-20/64	23	658	37 1,855	19 1,575	64 2,778	3.0 0.08	0 0.00	168 2,745	65 1,335	82 2,745	4.8 0.08	0.1 0.01	0.4 0.4	1.6 0.4	Fe = 0.00 Color = 5	388 ^a	44	170	49	
1/21-31/64	270	410	33 1,655	13 1,277	29 1,406	3.5 0.09	0 0.00	150 2,446	42 0.87	75 2,771	2.5 0.09	0.3 0.01	0.3 0.3	1.5 0.3	Fe = 0.04 Color = 30	255 ^a	30	146	23	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

0.00

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively

i Mineral analysis (USGS) - United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFCO) - San Bernardino County Flood Control District, City of Los Angeles, Department of Water and Power (LADWP), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY SYSTEM (SBS, 2)

Date and time of collection P.S.T.	Oscilloscope Temp. in °F. Mean	Dissolved oxygen ppm	Specific conductance at 25°C µmhos/cm	Mineral constituents in parts per million												Total dissolved solids in ppm	Hardness as CaCO ₃ Total in ppm	Total iron in ppm	Calcium analyzed by 158	
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)					Other constituents

ALAMEN CREEK NEAR MILES (STA. 73)																		
2/1-6/64	12		6.71	2.2	2.9	50	2.18	1.0	2.05	0.6	2.1	6.2	0.1	0.2	1.2	Fe color = 5		
2/9-15/64	12		9.14	2.29	3.4	76	2.79	0.7	2.82	0.6	96	8.6	0.2	0.2	1.6	Fe color = 5		
2/16-29/64	21		8.2	2.45	2.6	78	3.39	0.6	1.92	0.8	107	4.6	0.2	0.2	1.3	Fe color = 4		
3/1-13/64	15		8.8	2.23	2.5	82	2.15	0.7	1.95	0.9	116	2.5	0.2	0.2	1.2	Fe color = 15		
3/14-23/64	20		7.95	2.2	2.7	72	3.3	0.7	1.93	0.8	102	3.5	0.2	0.2	1.6	Fe color = 10		
3/26-31/64	16		7.05	1.70	3.2	60	2.60	0.7	1.91	0.8	77	6.1	0.2	0.2	1.8	Fe color = 19		
4/1-6/64	12		8.62	2.70	3.0	76	2.70	0.7	2.16	0.8	99	2.5	0.2	0.2	1.3	Fe color = 0.02		
4/9-19/64	23		7.18	2.25	2.89	66	2.87	0.7	1.75	1.1	91	6.1	0.2	0.2	1.6	Fe color = 15		
4/20-30/64	5		7.79	2.86	2.67	52	2.67	0.7	2.49	1.5	77	2.6	0.2	0.2	1.0	Fe color = 0.02		
5/1-10/64	21		8.02	2.40	2.35	70	3.04	0.7	2.16	0.5	95	6.7	0.2	0.2	1.2	Fe color = 7		
5/11-20/64	44		5.61	1.65	1.9	48	3.9	0.7	1.68	0.9	66	4.9	0.1	0.2	1.3	Fe color = 7		
5/21-30/64	41		4.98	1.70	1.36	43	3.3	0.7	1.62	0.8	58	4.0	0.2	0.2	1.7	Fe color = 6		
6/1-10/64	43		4.73	1.31	1.6	41	2.4	0.7	1.36	0.7	58	3.6	0.1	0.2	1.6	Fe color = 0.01		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), cadmium (Cd), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺) reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively

i Mineral analyses made by United States Geological Survey (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS)

j Organic analyses made by Southern California (SWD), Los Angeles Department of Water and Power (LADWP), City of Long Beach, Department of Public Health (LBPH), Tamarac Testing Laboratories, Inc. (TTL) or California Department of Water Resources (DWR), as indicated

12/5/64 1641 20

TABLE D-2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled PST	Discharge Temp. in °C	Dissolved oxygen % sat	Specific conductance at 25°C	pH	Mineral constituents in parts per million										Total dissolved in ppm	Hardness as CaCO ₃ Total N.C. ppm	Turbidity MPN/ml from 100 ml	Analyzed by 1						
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Polysulfate (Al)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)	Other constituents			
ALAMEDA CREEK NEAR NILES (STA. 73)																								
6/11-20/64	44		485	7.9	310 1,720	17 1,400	43 1,877	3.2 1.08	0 0.00	1.8 2.26	42 0.87	60 1.59	2.9 0.05	0.1 0.01	0.3		Fe = 0.01 Color = 7	284.6	39	145	32		USGS	
6/21-30/64	41		461	8.1	29 1,705	16 1,335	39 1,770	2.9 1.07	0 0.00	1.2 2.33	38 0.79	52 1.47	3.2 0.05	0.2 0.01	0.3		Fe = 0.02 Color = 4	275.8	37	140	24		USGS	
ALAMEDA CREEK NEAR NILES (STA. 73)																								
11-3-63	28	8.8	94	8.0	57 2,786	37 2,786	62 2,791	0 0.00	1.6 2.62	160 2.62	94 2.75	0.2			0.2			47	164	33	45	23	USGS	
11-7-63	7.8	10.5	100	8.2	74 2,791	42 2,286	62 2,770	0 0.00	2.0 3.36	205 3.36	78 2.20	0.6			0.6			39	212	44	15	2.3	USGS	
12-5-63	4.6	12.9	106.3	8.3	70 2,791	42 2,286	70 3,004	0 0.10	3 3.18	194 3.18	88 2.46	0.5			0.5		As = 0.01 ABS = 0.0	42	212	48	10	2.3	USGS	
1-9-64	35	12.5	99	8.2	70 2,786	40 2,786	40 2,791	0 0.00	1.8 2.62	128 2.62	98 2.76	0.5			0.5		ABS = 0.1	47	149	44	60	23	USGS	
2-7-64	10	11.6	93	8.2	58 2,552	58 2,552	58 2,552	0 0.00	1.3 4.18	175 4.18	62 1.75	0.6			0.6		ABS = 0.0	30	290	60	15	2.3	USGS	
3-5-64	38	11.3	103	8.2	78 2,791	78 2,791	78 2,791	0 0.10	3 3.18	159 2.61	122 3.44	0.6			0.6		ABS = 0.0	43	224	89	30	21	USGS	
4-9-64	33	10.2	100	8.1	76 2,791	76 2,791	76 2,791	0 0.00	2 2.62	182 2.62	103 2.91	0.6			0.6		ABS = 0.1	42	220	67	20	23	USGS	
5-5-64	5.4	10.5	101	8.1	72 3,391	34 2,811	76 3,331	0 0.00	0 2.61	316 5.18	90 1.87	90 2.59	0.3 0.05	0.3 0.02	0.3		As = 0.00 ABS = 0.1 PO ₄ = 0.85	536	34	320	71	8	2.3	USGS
6-10-64	44	9.8	98	8.4	42 2,606	42 2,606	42 2,606	0 0.10	3 3.18	128 2.70	31 1.44	0.3			0.3		ABS = 0.1	41	133	23	55	62	USGS	
7-8-64	41	8.5	95	8.3	36 2,606	36 2,606	36 2,606	0 0.10	3 3.18	133 2.76	40 1.13	0.2			0.2		ABS = 0.2	36	132	18	200	62	USGS	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Public Health (LADPH), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time analyzed P.S.T.	Onset of rain in cfs	Observed oxygen ppm	Specific conductance at 25°C $\frac{\mu}{\text{cm}}$	Mineral constituents in parts per million										Total dissolved in ppm	Hardness as CaCO ₃ ppm	Total N.C. ppm	Turbidity NTU	Coliform MPN/ml	Analyzed by
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						
ALAMEDA CREEK NEAR NILES (STA. 73)																			
8-31-64	41	79	8.6	105	48.1	8.1	1110	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	USGS
10-4-63	31	68	10.6	115	638	8.1	1150	8.1	1150	8.1	1150	8.1	1150	8.1	1150	8.1	1150	8.1	USGS
ARROYO DEL VALLE NEAR LIVERMORE (STA. 71)																			
11-5-63	0.1	58	7.5	74	1110	8.0	8.1	8.0	8.1	8.0	8.1	8.0	8.1	8.0	8.1	8.0	8.1	8.0	USGS
12-5-63	0.1	46	7.3	62	1060	8.2	7.4	8.2	7.4	8.2	7.4	8.2	7.4	8.2	7.4	8.2	7.4	8.2	USGS
1-10-64	1.4	49	11.8	104	752	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	USGS
2-3-64	15	54	10.4	98	506	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	USGS
3-2-64	4.6	57	10.8	106	557	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	USGS
4-10-64	2.2	60	10.2	104	615	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	USGS
5-4-64	0.8	60	10.5	104	694	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	USGS
6-10-64	0.4	66	11.1	121	700	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	USGS
7-8-64	0.4	74	8.9	105	713	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	8.3	8.2	USGS

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in eqm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), Terminal Testing Laboratories, Inc. (ITLI), or California Department of Water Resources (DMR), as indicated

j Cationic analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), Terminal Testing Laboratories, Inc. (ITLI), or California Department of Water Resources (DMR), as indicated

k Cationic analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), Terminal Testing Laboratories, Inc. (ITLI), or California Department of Water Resources (DMR), as indicated

l Cationic analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), Terminal Testing Laboratories, Inc. (ITLI), or California Department of Water Resources (DMR), as indicated

m Cationic analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), Terminal Testing Laboratories, Inc. (ITLI), or California Department of Water Resources (DMR), as indicated

n Cationic analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), Terminal Testing Laboratories, Inc. (ITLI), or California Department of Water Resources (DMR), as indicated

8-30-64 104 100

TABLE D-2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen in ppm	Specific conductance at 25°C in μ mhos/cm	pH	Mineral constituents in equivalents per million												Total dissolved solids in ppm	Percent acid-soluble in ppm	Hardness as CaCO ₃ in ppm	Total N.C. in ppm	Turbidity in NTU	Accepted by 1
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)						
8-5-64 1700	Flooded																						
9-1-64 1150	Flooded																						
ABSTRACT DEL VALLE NEAR LIVERMORE (STA. 71)																							
DENISTON CREEK (STA. 232)																							
10-8-63 1535	2	70	9.8	261	7.8 7.7	17 0.85	7.9 0.35	26 1.04	0.8 0.02	0	89 1.46	8.6 0.18	31 0.87	0.2	0.4	0.02	19		153	41	75	2	DNR
10-17-63 1330				260									40								80		Field determinations
11-14-63 1200	2.25	58	9.1	266	6.7 7.7	21 1.05	6.4 0.33	23 1.00	0.8 0.02	0	88 1.44	10 0.21	32 0.90	1.2	0.2	0.02	0.0		131	38	79	7	DNR
11-27-63				257									40								85		Field determinations
12-12-63 1435	1.5	47	10.9	275	7.2 7.6	21 1.05	6.9 0.33	23 1.00	0.6 0.02	0	89 1.46	9.5 0.20	33 0.93	0.4	0.3	0.04	20	Fe = 0.00	159	38	81	8	DNR
12-31-63 1000				265									40								80		Field determinations
1-13-64 1100	2.00	46	10.9	273	7.3												0.2		156		80		DNR
1-27-64 0941				265									40								90		Field determinations

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in ppm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Public Health (LADPH); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

j San Francisco Bay Region (NO. 2).

3-55-64-1 64-1 200 390

ANALYSES OF SURFACE WATER SAN FRANCISCO BAY REGION (NO. 2)

Date collected and analyzed P.S.T.	Discharge Temp in °F	Dissolved oxygen in ppm	Specific conductance at 25°C µmhos/cm	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Per cent sodium in ppm	Hardness as CaCO ₃ Total N.C. in ppm	Total hard- ness in ppm	Temp- erature in °F	Analyzed by			
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)							Boron (B)	Silica (SiO ₂)	Dimer constituents
DENISTON CREEK (STA. 252)																							
2-17-64 1220	1	52	10.6	7.2 7.5	22 1.10	5.8 0.48	24 1.04	0.6 0.02	0	81 1.33	12 0.25	32 0.80	4.3 0.07		0.0		ABS = 0.0	153	39	79	13	DNR	
2-28-64																							
3-23-64 1430	1.5	55	11.5	7.5											0.0			156		80		Field determi- nations	
3-27-64																				78	6.5	DNR	
4-20-64	1	58															ABS = 0.0	162		85		Field determi- nations	
4-24-64															0.0					84	8.0	DNR	
5-11-64 1340	2	63	9.6	7.3											0.0			170		72		Field determi- nations	
10-9-63 1415	1.1	62	9.3	8.1 8.3	84 4.19	22 1.06	30 1.30	3.4 0.09	0	318 5.21	72 1.30	26 0.73	0.1 0.00	0.4 0.02	0.08 0.02	24		418	18	302	41	DNR	
11-14-63 1250	1.8	58	9.7	8.2 8.2	85 4.24	19 1.55	29 1.26	3.1 0.08	0	304 4.98	67 1.39	23 0.65	0.9 0.01		0.1			380	18	290	41		
12-12-63 1340	1.2	45	11.6	8.1 8.2	88 4.39	20 1.64	31 1.35	2.5 0.06	0	311 5.10	74 1.34	26 0.73	0.2 0.00	0.4 0.02	0.09 0.02	21	Fe = 0.00	424	18	302	47		
1-13-64 1130	1.1	45	11.9	8.2 8.2	88 4.39	22 1.00	32 1.39	2.4 0.06	0	320 5.24	76 1.56	26 0.73	0.4 0.01	0.4 0.02	0.1 0.02	19		445	18	310	48		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in gpm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

3252-1-64 1-64 200 200

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time of day P.S.T.	Discharge Temp in °C and °F	Dissolved oxygen ppm	Specific conductance at 25°C µmhos/cm	Mineral constituents in equivalents per million												Total dissolved solids in ppm	Per cent sodium in ppm	Hardness as CaCO ₃ Total N.C. ppm	Temp. hard- ness in ppm	Analyzed By
				Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- dioxide (CO ₂)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluor- ide (F)	Boron (B)	Silica (SiO ₂)					
2-17-64 1415	1.5 52	11.2	642	7.3 8.3	18 1.69	27 1.17	2.4 0.06	0 0.00	262 4.62	73 1.32	26 0.73	4.2 0.07		0.1	386	17	287 56		DCA	
3-23-64 1530	1.8 48	11.3	619	8.2										0.1	372		267 3.2			
4-20-64 1300	0.8 53	11.2	676	8.4 8.5	17 1.41	31 1.35	2.8 0.07	0 0.00	311 5.10	67 1.19	26 0.73	1.4 0.02		0.1	423	19	288 33 3.0			
5-11-64 1500	0.7 58	10.0	682	8.4										0.1	428		300 1.5			
2-28-64 1200	2.8 54		764	8.6	83 4.14	22 1.83	2.8 0.07	10 0.33	256 4.20	101 2.10	52 1.47	1.2 0.02		0.1	499	25	299 72		OMR	
4-24-64 1030			852											0.2	530		314			
5-11-64	56	10.3	857	8.2 8.3	86 4.29	25 2.06	4.4 0.11	0 0.00	294 4.82	102 2.12	62 1.75	5.0 0.08		0.2	536	27	318 77			
SAN GREGORIO CREEK (STA. 265)																				
10-9-63 1215	2 65	9.3	1010	7.9										0.47	636		360		OMR	
11-14-63	4 61	9.3	984	8.1							82			0.5			339			
12-12-63	1 42	12.8	935	8.1										0.41	594		326			

Field pH

Laboratory pH

Sum of calcium and magnesium in edm.

2. 300 of calcium and magnesium in ppm.

0.00

Derived from conductivity vs. IDS curves.

Determined by addition of a

9 Gravimetric determination

^h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Fire

Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date sample P. S. T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Specific conductance at 25°C µmhos/cm	Mineral constituents in parts per million										Total dissolved solids in ppm	Total CaCO ₃ in ppm	Total Hardness in ppm	Total N.C. in ppm	Total CaCO ₃ in ppm	Total Hardness in ppm	Analyzed by, I				
					equivalents per million																				
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)	Other constituents								
1-13-64 1200	1	42	13.2	986	8.2																				
2-17-64 1615	5	49	11.7	883	8.1																				
3-23-64 1600	5	52	11.0	748	8.1	25 2.99	57 2.48	3.2 0.08	0 0.00	209 3.42	120 2.50	34 1.52	0.8 0.01												
6-20-64 1330	1	60	10.9	976	8.2																				
5-11-64 1530	1	65	9.6	986	8.4																				
10-3-63 1910	130	68	8.8	98	8.0		12 3.50e	0.52	0	176 2.88		9.0 0.25													
11-8-63 1335	0.3	59	8.8	589	7.3		18 5.42e	0.78	1	261 4.28		16 0.39													
12-4-63 1910	59	49	11.3	99	8.0		11 3.00e	0.48	0	148 2.43		6.0 0.17													
1-7-64 1130	80	47	11.6	100	8.1		13 3.54e	0.57	16 0.27	152 2.49		3.0 0.08													
2-6-64 1145	23	48	11.7	102	8.2		12 2.92e	0.52	0	122 2.00		7.8 0.22													
3-5-64 1200	18	53	11.5	107	8.2		15 4.33e	0.65	2	171 2.80		12 0.34													
4-7-64 1065	8.3	59	11.1	111	8.4		23 5.98e	1.00	5	246 4.03		15 0.42													

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

3-25-64 3-64 3-64 3-64

TABLE D-2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time of sample P.S.T.	Discolor in cfs	Temp in °F	Dissolved oxygen ppm	% Sat	Specific Conductance at 25°C μ	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ in ppm	Turbidity in ppm	Calciformity in ppm	Analyzed by			
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Barium (Ba)	Silica (SiO ₂)	Other constituents
5-6-64 1040	1.5	58	10.6	105	685	83 4.74	31 2.38	25 1.09	2.8 0.07	4 0.13	286 4.69	116 2.42	16 0.65	1.1 0.02	0.3 0.02	0.1 0.1	451	14	336	95	105	2.3	USGS
6-10-64 1010	5.7	60	9.6	98	524	8.3 8.6	4.88 4.87	20 0.87	10 0.33	202 3.31	12 0.34	12 0.34	0.33	0.1	0.1	15	244	62	40	62	23	6.2	
7-8-64 1000	60	72	8.5	99	807	8.4 8.4	8.04 8.4	32 1.39	8 0.27	336 5.51	18 0.31	18 0.31	0.31	0.1	0.1	15	402	113	220	13	6.2	13	
8-6-64 1000	0.5	68	9.5	106	863	8.2 8.2	8.24 8.24	33 1.44	4 0.13	388 6.36	22 0.62	22 0.62	0.62	0.2	0.2	14	432	107	5	23	6.2	23	
9-3-64 1100	0.5	68	9.7	108	785	8.0 8.1	20 1.62	28 1.22	3.0 0.08	0 0.00	351 5.75	131 2.73	16 0.65	0.4 0.01	0.3 0.15	525	13	393	105	1	2.3	6.2	
PESCADERO CREEK (STA. 256)																							
10-9-63 1100	5	63	9.0		774	60 2.39	27 2.24	60 2.61	4.6 0.12	0 0.00	290 4.75	73 1.52	63 2.35	0.1 0.00	0.4 0.02	0.38 0.26	476	33	262	24		DMR	
10-17-63 1010	4.5				630								70					230				Field determinations	
11-14-63 1415	9	59	9.9		666	62 3.09	19 1.59	49 2.13	3.5 0.09	0 0.00	234 3.84	77 1.60	48 1.35	0.7 0.01	0.4	386	31	234	42		DMR		
11-27-63 1205	18				500								40				205					Field determinations	
12-12-63 1030	8	38	12.8		658	7.7 8.0	65 3.24	46 2.00	2.8 0.07	0 0.00	233 3.82	79 1.64	44 1.24	0.4 0.01	0.4 0.02	0.39 0.21	401	30	233	42		DMR	
12-31-63 1100	6.6				672								55				255					Field determinations	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs. TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Analytical medium and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Annual analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBPDH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DMR), as indicated

j Public Health (LBPDH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DMR), as indicated

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time of analysis P.S.T.	Oreforma in cfs	Temp in °F	Dissolved oxygen ppm	Specific conductance (microhm at 25°C)	Mineral constituents in equivalents per million											Total dissolved solids in ppm	Percent solids in ppm	Hardness as CaCO ₃ ppm	Turbidity NTU	Analyzed by			
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbon- dioxide (CO ₂)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)						Silica (SiO ₂)	Other constituents	
1-13-64 1300	5.5	41	14.3	712	8.2 0.12	49 3.44	19 1.39	55 2.39	3.0 0.08	0 0.00	255 4.18	81 1.69	51 1.74	0.1 0.00	0.4 0.02	0.4	19	ABS = 0.0	434	32	252	43	DMR
1-27-64 1143	43			450									32										Field determinations
2-18-64 0950	14.5	42	12.7	621	7.6 8.0	63 3.14	18 1.46	37 1.61	2.8 0.07	0 0.00	213 3.49	78 1.62	38 1.07	5.7 0.09		0.3	ABS = 0.0	364	26	230	55	DMR	
2-28-64 1300	11.4			570									50										Field determinations
3-23-64 1630	28.2	48	11.2	518	8.1 7.9	50 2.50	13 1.04	35 1.52	2.9 0.07	0 0.00	159 2.61	76 1.36	30 0.85	0.6 0.01		0.2			310	30	177	47	DMR
3-27-64 1230	14			560									42										Field determinations
4-20-64 1430	5.5	59	10.9	695	8.2								52			0.4	ABS = 0.0	422		240	4.5	DMR	
4-24-64	5			600																240			Field determinations
5-11-64 1630	4.5	66	10.0	710	8.4											0.5			437		243	2.7	DMR
10-9-63 0930	2	61	7.7	438	7.3											0.17			267		140		DMR

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Actual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL) or California Department of Water Resources (DMR); as indicated.

105-441 1-63 200 390

TABLE D-2
ANALYSES OF SURFACE WATER
SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge Temp. in °F	Dissolved oxygen in ppm	Specific Conductance at 25°C	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Percent solids in ppm	Hardness in ppm CaCO ₃	Turbidity in nephelometric units	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Other constituents			
11-14-63 1345	10	58	9.1	7.6													120		DMR
12-12-63 1125	4	41	11.9	7.3													135		
1-13-64 1320	3	45	10.9	8.1													160		
2-18-64 1055	5.5	47	11.1	7.4												ABS = 0.0	127		
3-23-64 1700	10.1	50	11.0	7.4	26	8.3	22	2.8	0	101	26	24	0.9				99	16	330
4-20-64 1320	1.8	52	8.5	7.8	1.30	0.68	0.96	0.07	0.00	1.66	0.54	0.68	0.01				137	45	
5-11-64 1705	1.5	57	8.0	7.5													134	40	
6-20-64 1600	0.8			407												ABS = 0.00	138	33	DMR
10-23-63 1120	7.7	68	8.6	95													17	148	1
																			USGS

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

TABLE D-2
ANALYSES OF SURFACE WATER
SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge Temp in cts in of	Dissolved oxygen in % Sat	Specific Conductance at 25°C in micromhos/cm	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Percent total solids in ppm	Hardness as CaCO ₃ Total N.C. in ppm	Total in dgm	Turbidity in MPN/ml	Coliform h	Analyzed by
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)							
GAZOS CREEK (STA. 253)																				
11-14-63 1700	4	58	9.5													0.1	179	102	DMR	
12-12-63 0930	1	39	12.6	7.4												0.09	208	105		
1-13-64 1500	1	45	12.4	7.7	25	12	30	2.2	0	109	42	32	0.1	0.2	0.1	18	223	36	22	
2-18-64 1210	2	45	12.3	7.2	1.25	0.37	1.30	0.06	0.00	1.76	0.87	0.70	0.00	0.01		0.1	192	97		
3-23-64 1730	4	51	10.7	7.4												0.2	221	97	32	
4-20-64 1640	1	56	10.3	7.8												0.1	217	106	3.6	
5-11-64 1755	1	57	10.0	8.1												0.1	218	106	5.1	
WHITEHOUSE CREEK (STA. 246)																				
10-10-63 1045	0.1	58	7.0	7.2												0.28	300	133	DMR	
11-14-63 1600	1.5	58	8.3	7.6												0.2	291	139		
12-12-63 0915	0.9	41	11.9	7.3												0.19	283	126		
1-13-64 1600	0.3	45	11.0	7.3												0.3	357	176		
2-18-64 1250	0.5	47	11.5	7.3												0.1	233	101		

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in eqm.

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e. Derived from conductivity vs. TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i. Annual analyses from the United States Geological Survey, Quality of Water Branch (USGS); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCDD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DMR); as indicated.

3-755-2-4-61 6-62 200 590

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time analyzed P.S.T.	Discharge in cfs	Temp in deg F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH	Mineral constituents in equivalents per million											Total dissolved solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Turbid- ity in JPM	Caliform MPN/ml	Analyzed by		
			ppm	%Sol			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbon- dioxide (CO ₂)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)						Silica (SiO ₂)	Other constituents
3-23-64 1730	1	50	10.5			7.3													70	OKR				
4-20-64 1705	0.3	53	10.0			7.4													20					
5-11-64 1800	0.3	54	9.0			7.3													32					
WHITENHOUSE CREEK (STA. 266)																								
																0.2			101					
																0.2	ABS = 0.0		124					
																0.2			143					

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in ppm.

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e. Derived from conductivity vs TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Arsenic median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i. Mineral analyses by the following: United States Geological Survey, Quality of Water Branch (USGS); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

3-23-64 1730 200 390

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge Temp in air in deg	Dissolved oxygen in % sat	Specific conductance in micromhos at 25°C	pH a	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ in ppm	Total N C in ppm	Turbidity in MPN/ml	Coliform by l
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					
SAN LORENZO RIVER SIX MILES NORTH OF BOULDER CREEK (STA. 228)																			
10-7-63 1220	1	57	9.8	94	8.0 8.2	5.70c	26 1.0c		0 0.00	261 4.26	13 0.37	0.8 0.01							
11-6-63 1500	4	51	10.0	90	8.4 8.0	3.84c 0.78	18		0 0.00	184 3.02	12 0.34	0.7 0.01							
12-10-63 0915	2	41	11.3	88	7.9							0.0							
1-14-64 0905	1.5	40	12.0	92	8.0	4.92c			0	250 4.10	15	0.4							
2-19-64 0840	2	45		536	7.5 8.1	4.76c			0	235 3.85	16	0.2							
3-24-64 0930	3	42	12.0	95	8.1 8.0	4.30c			0	204 3.34	15	1.0							
4-21-64 0930	2	47	11.6	98	8.4 8.1	4.86c			0	232 4.13	16	1.2							
5-12-64 0910	1	50	10.2	90	8.3 8.3	4.98c			2 0.07	254 4.16	16	0.4							
6-25-64 0755	1.5	59	8.9	88	7.8 8.4	4.98c	26 1.0c		2 0.07	258 4.23	15	1.8							
7-21-64 0730	1	56	8.1	77	7.5 8.7	5.07c			16 0.53	237 3.88	15	0.0							
8-18-64 1315	0.8	62	9.7	99	8.2						16	0.4							
9-23-64 0810	0.5	55	9.1	86	8.0	4.98c					9.3 0.26	1.1							

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in eqm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺) reported here as 0.0 except as shown 0.00

e Derived from conductivity vs. TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively

i Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

j Mineral analyses made by United States Geological Survey, Quality Assurance Program (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), California State Water Resources Control Board (CSWRCB), Los Angeles Department of Water and Power (LADWP), City of Long Beach, Department of Public Health (LDBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

k San Bernardino County Flood Control District (SBCFD), California State Water Resources Control Board (CSWRCB), Los Angeles Department of Water and Power (LADWP), City of Long Beach, Department of Public Health (LDBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

32595-0-41 6-63 200 390

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time analyzed P.S.T.	Discharge Temp in cte in °F	Dissolved oxygen in cte in %	Specific Conductance at 25°C in $\frac{\mu}{cm}$	Mineral constituents in parts per million												Total dissolved solids in ppm	Hardness as CaCO ₃ Total N.C. in ppm	Turbidity in JPN	Analyzed by
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)				
BEAR CREEK FOUR MILES NORTHEAST OF BOULDER CREEK (STA. 206)																			
10-7-63 0820	0.5	55	9.4	88	669	7.7 8.7	4.2 5.31c	0 0.00	24.5 4.02	0 0.00	27 0.76	0.8 0.01			Fe = 0.03 PO ₄ = 0.27	435	266	DNR	
11-6-63 1430	3	52	10.1	92	505	7.9	2.6 4.02c	0 0.00	154 2.52	0 0.00	1.6 0.45	0.6 0.01			Fe = 0.08 Mn = 0.00 ARS = 0.0 PO ₄ = 0.27	330	201		
12-9-63 1530	2	47	10.9	93	581	8.1		0 0.00	217 3.56	0 0.00	2.0 0.56	0.4 0.01			PO ₄ = 0.22	380	252		
1-14-64 1100	1	40	12.6	97	614	7.9	5.03c	0 0.00	195 3.20	0 0.00	1.7 0.48	0.3 0.01			PO ₄ = 0.21	400	242		
2-19-64 1030	2	44			591	7.6 8.2	4.84c	0 0.00	172 2.82	0 0.00	1.4 0.39	1.3 0.02			PO ₄ = 0.22	335	205	5.5	
3-24-64 1000	3	47	11.3	96	514	8.1 8.3	4.10c	0 0.00	214 3.51	0 0.00	2.0 0.56	1.3 0.02			PO ₄ = 0.23	395	242	2.5	
4-21-64 1445	1.5	51	10.7	96	607	8.0	4.84c	0 0.00	218 3.57	0 0.00	2.2 0.62	0.0 0.00			PO ₄ = 0.28	405	249	1.5	
5-12-64 1400	1.5	63	9.9	102	624	8.2 8.3	4.98c	0 0.00	225 3.69	0 0.13	2.8 0.79	1.0 0.02			PO ₄ = 0.21	420	253	2.0	
6-24-64 1220	1	70	9.0	100	644	7.7 8.4	5.05c	0 0.00	231 4.11	0 0.00	3.6 1.02	0.0 0.00			PO ₄ = 0.20	465	266	0.8	
7-21-64 0945	1	60	9.5	95	711	7.6 8.3	5.31c	0 0.00		0 0.00	89 2.51	0.4 0.01			ARS = 0.0 PO ₄ = 0.25	590		0.5	
8-18-64 0945	0.8	59	8.9	88	905	7.9				0 0.00	82 2.31	0.4 0.04			PO ₄ = 1.4	530	271	1.8	
9-23-64 1200	0.5	60	9.3	93	818	7.9	5.41c												

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWD), California Department of Water and Power (CALWAP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

323-5-64d 1-64d 380 380

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Dissolved oxygen in cfs	Temp in °F	Specific Conductance (microhm/cm at 25°C)	pH	Major constituents in equivalents per million										Total dissolved solids in ppm	Percent total solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Turbidity in MPN/ml	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					
KINGS CREEK TWO MILES NORTH OF BOULDER CREEK (STA. 213)																			
10-7-63 1320	0.5	60	659	8.1	5.03c	44	0	0.00	2.31	3.79	36	0.6							
11-7-63 0845	2	47	10.7	90	570	30	0	0.00	1.68	2.75	26	0.5		0.2					
12-10-63 0935	1	39	12.0	91	613	7.7	0	0.00	2.15	3.72	30	0.8							
1-14-64 0930	0.5	35	13.0	93	667	8.2	0	0.00	2.15	3.72	30	0.8							
3-24-64 0940	2	44	12.3	100	553	7.8	0	0.00	1.71	2.80	24	0.3							
4-21-64 1000	0.8	49	12.6	110	659	8.1	0	0.00	2.12	3.47	32	0.1							
5-12-64 0945	0.5	52	10.0	91	674	7.8	0	0.00	2.19	3.59	34	0.0							
6-25-64 0840	0.5	62	7.9	81	698	8.1	0	0.00	2.33	3.82	40	1.0							
7-21-64 0815	0.5	60	8.0	80	760	8.2	0	0.00	2.62	3.97	47	0.0							
8-18-64 1230	0.1	68	8.0	87	829	7.8	0	0.00	2.33	3.82	40	1.0							
9-23-64 0830	0.1	53	7.1	65	864	7.7	0	0.00	2.19	3.59	34	0.0							

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs. TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range

i Annual analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWSD), Los Angeles Department of Water (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

j Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWSD), Los Angeles Department of Water (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

k Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWSD), Los Angeles Department of Water (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge Temp in cts in °F	Dissolved oxygen ppm %Sat	Specific conductance at 25°C	pH	Parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total T.C. in ppm	Turbidity in NTU	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)		
10-7-63 1430	0.1	57	7.6	7.3	6.0	3.84c	2.81		0	1.82	1.13	4.0	0.7					
11-7-63 0915	0.5	48	10.3	8.9	4.0	3.52c	1.74		0	1.26	0.82	3.0	0.2		0.1		192	
12-10-63 1000	0.5	41	11.5	9.0					0	2.06							176	
1-14-64 0955	0.3	38	11.8	8.8					0	1.70							320	
3-24-64 1015	0.5	44	11.7	9.5		2.94c			0			2.3	0.8				147	28
4-21-64 1030	0.3	47	11.1	9.4		3.62c			0	1.47	0.89	3.0	0.3				181	4.2
5-12-64 1010	0.3	52	9.9	9.0		3.76c			0	1.60	0.90	3.2	0.3				188	2.8
7-21-64 0850	0.3	67	8.1	8.7		3.86c			0	1.90	1.18	4.2	0.5				193	0.9
8-18-64 1130	0.1	65	8.1	8.6					0		0.7	1.32	1.6				435	2.1
9-23-64 0855	0.1	54	6.7	7.8		4.08c			0		2.6	0.73	1.2				204	2.0

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBOPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

3255-6-64 200

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge in cfs	Temp in deg f	Dissolved oxygen in % Sat	Specific conductance at 25°C in $\mu\text{mhos/cm}$	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO_3 in ppm	Turbidity, in ppm	Analyzed by	
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)					Boron Silica (B)
BEAR CREEK AT BULLDOZER CREEK (STA. 205)																			
10-7-63 0915	1	55	9.5	89	7.8	4.62c	43	0	219	32	1.0			Fe = 0.12 PO_4 = 0.32	231		DWR		
					8.1		1.87	0	3.59	0.90	0.02								
11-6-63 1400	5	52	10.0	91	7.8	2.90c	22	0	1.00	1.4	1.4			Fe = 0.24 ARS = 0.0 PO_4 = 0.42	165				
					7.8	0.96	0.96	1.64	0.39	0.02									
12-9-63 1600	3	46	11.3	95	7.7									PO_4 = 0.19	360				
					559														
1-16-64 1140	2	39	12.6	96	8.0	4.32c		0	1.95	24	0.5			PO_4 = 0.25	226				
					8.1			3.20	3.20	0.68	0.01			PO_4 = 0	210				
2-18-64 1030	4	42			7.4	4.20c		0	1.70	21	0.5								
					531			2.79	2.79	0.59	0.01			PO_4 = 0.16	355				
3-24-64 1140	5	45	12.2	101	8.1	3.62c		0	1.51	19	0.5			PO_4 = 0.18	310	9.5			
					484			2.77	2.77	0.54	0.01								
4-21-64 1230	3	52	12.0	109	8.2	4.30c		0	1.94	25	2.0			PO_4 = 0.19	218	3.8			
					587			3.18	3.18	0.70	0.03								
5-12-64 1325	2.5	59	10.7	106	8.2	4.42c		0	2.00	28	0.0			PO_4 = 0.25	380	2.8			
					593			3.28	3.28	0.79	0.00								
6-24-64 1015	2	63	9.2	95	608	4.48c	38	2	2.09	34	0.9			PO_4 = 0.23	390	1.5			
					608	1.65	1.65	3.72	3.72	0.96	0.01								
7-21-64 1015	3	61	8.8	89	656	4.58c		0	2.25	42	0.0			PO_4 = 0.32	420				
					802					1.18	0.00								
8-18-64 1030	1	61	8.9		7.8	Sample broken by laboratory												0	
					630														
9-23-64 1010	55	8.4			7.8	4.38c				31	0.8			PO_4 = 0.32	455	229	0.5		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in eqm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and barium (Ba) reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), California Department of Water Resources (CDWR), California Department of Public Health (CDPH), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Tammam Testing Laboratories, Inc. (ITL), or California Department of Water Resources (DWR), as indicated.

35504-4-6-61 200 390

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of day and P.S.T.	Discharge Temp in °F	Dissolved oxygen ppm	Specific conductance microhm/cm at 25°C	pH	Mineral constituents in parts per million											Total dissolved solids in ppm	Hardness as CaCO ₃ ppm	Turbidity in NTU	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)				
BOULDER CREEK AT BOULDER CREEK (STA. 208)																			
10-7-63 1105	3	57	9.8	94	207	7.3	2.2	0	89	1.62	7.4	0.7	0.01	0	0	0	0	135	DWR
11-6-63 1330	12	53	10.3	95	166	7.4	2.4	0	57	0.93	8.8	0.5	0.01	0	0	0	0	105	
12-10-63 1110	8	46	11.5	97	205	7.4	2.4	0	0	0	0.2	0.00	0.00	0	0	0	0	130	
1-14-64 1245	7	43	12.2	98	208	7.7	2.7	0	85	1.39	9.9	1.2	0.02	0	0	0	0	135	
2-19-64 0955	8	45				7.4	2.4	0	80	1.31	8.8	0.3	0.00	0	0	0	0	130	
3-24-64 1020	10	46	12.5	105	185	7.6	2.6	0	66	1.08	8.3	1.5	0.02	0	0	0	0	120	
4-21-64 1130	5	52	11.5	104	207	7.7	2.7	0	87	1.42	9.5	0.1	0.00	0	0	0	0	135	
5-12-64 1100	3	54	10.5	98	214	7.9	2.9	0	92	1.51	9.7	0.2	0.00	0	0	0	0	140	
6-24-64 0930	4	62	9.0	92	235	8.0	3.0	0	102	1.67	11	1.1	0.02	0	0	0	0	150	
7-21-64 1045	4	60	9.3	93	235	8.0	3.0	0	107	1.75	12	1.4	0.02	0	0	0	0	150	
8-18-64 1140	5	63	9.6	99	245	8.0	3.0	0	107	1.75	12	1.4	0.02	0	0	0	0	160	
9-23-64 0955	4	57	9.7	94	242	7.6	2.6	0	107	1.75	12	1.4	0.02	0	0	0	0	155	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively

i Annual median and range, respectively

j Annual median and range, respectively

k Annual median and range, respectively

l Annual median and range, respectively

m Annual median and range, respectively

n Annual median and range, respectively

o Annual median and range, respectively

p Annual median and range, respectively

q Annual median and range, respectively

r Annual median and range, respectively

s Annual median and range, respectively

Analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

3075-6-64 6-64 200 200

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 2)

Date sample collected P.S.T.	Discharge in cfs in ft	Temp in °F	Dissolved oxygen in ppm	Specific conductance at 25°C in %Sal	pH	parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total N.C. in ppm	Turb- id- ity - MPN/ml in 100 ml	Analyzed by	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)			
SAN LORENZO RIVER AT BOULDER CREEK (STA. 227)																				
10-7-63	2	57	9.5	92	8.0		5.13c	2.30		0	239		1.92	0.8						
10-15				731	8.1					0.00	3.32		0.01							
11-6-63	10	51	10.0	90	7.7		2.34c	2.1		0	86		21	1.7		0.1				
14-09				365	7.7			0.91		0.00	1.41		0.59							
12-9-63	6	46	11.3	95	7.7					0	195		44	0.5						
1-14-64	4	39	12.9	98	8.1		4.20c			0.00	3.20		1.72	0.01						
11-25				628	8.1					0	166		35	0.5						
2-19-64	6	42		569	8.2		4.20c			0.00	2.72		0.39	0.01						
10-20										0										
3-24-64	8	46	12.2	102	8.0		3.56c			0.00	2.39		29	0.6						
11-30				496	7.8					0	146		0.82	0.01						
4-21-64	3	52	12.2	111	8.2		4.48c			0	195		46	0.0					9.5	
11-65				627	8.2					0.00	3.20		1.30	0.00					3.0	
5-12-64	2	60	10.7	107	8.2		4.58c			0.00	3.34		52	0.0					2.46	
13-00				654	8.2					0	304		1.47	0.00						
6-25-64	2	64	8.3	87	7.7		4.76c	48		0	219		59	1.2						
09-30				689	8.2			2.09		0.00	3.59		1.66	0.02					2.5	
9-24-64	2	64	8.5	89	7.8		5.33c						66	2.3					2.8	
15-00				924									1.86	0.06						
10-10-63	0.1	38	8.0	78	6.8															
14-00				228																
ALBA CREEK (STA. 245)																				

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DMR), as indicated

3-25-64 1-63 200 290

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of collection P.S.T.	Discharge Temp in cfs	Dissolved oxygen ppm %Sat	Specific conductance at 25°C µmhos	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Turbidity in JPM/ml	Analyzed by	
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)
11-7-63 1130	0.5	51	10.7	96															DCR
12-10-63 1250	0.1	47	10.1	86															
1-16-64 1420	0.1	46	10.4	87															
3-25-64 1015	0.1	47	11.5	98	161	7.1	1.14	0 0.00	64 1.05	8.2 0.23	1.3 0.02				PO ₄ = 0.30	57	7.5		
ALBA CREEK (STA. 245)																			
10-8-63 0830	0.5	56	9.9	94	189	7.5													DCR
11-7-63 1050	1	52	10.7	97	176	7.6													
12-10-63 1135	1	48	11.3	97	170	7.4													
1-16-64 1405	1	48	11.5	99	162	7.4													
3-24-64 1645	1	47	11.7	99	162	7.6	1.22	0 0.00	80 1.31	6.2 0.17	1.2 0.02				PO ₄ = 0.02	61	0.7		
4-22-64 0845	0.5	48	11.4	98	173	7.7	1.30	0 0.00	89 1.46	6.4 0.18	0.4 0.01				PO ₄ = 0.04	65	0.6		
5-12-64 1440	0.5	56	10.3	98	181	7.7	1.36	0 0.00	92 1.51	7.0 0.20	0.0 0.00				PO ₄ = 0.07	68	0.05		
9-23-64 1240	0.3	61	9.3	93	213	7.6	1.56			9.1 0.26	1.5 0.02				PO ₄ = 0.08	78	0.9		
CLEAR CREEK AT BROOKDALE (STA. 210)																			
DCR																			

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively

i Annual analyses made by United States Geological Survey of Southern California (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), San Bernardino County Flood

Control District (SBCFD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of

Public Health (LBDPH), Terminal Testing Laboratories, Inc (TTL), or California Department of Water Resources (CDWR), as indicated

157-7-64-1 1-64-1 200

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date and time of day P.S.T.	Discharge Temp in cts inf	Dissolved oxygen ppm	%Sol	Specific conductance at 25°C µmhos/cm	pH	Mineral constituents in equivalents per million												Total dis- solved solids in ppm	Per- cent sol- ids from Total H.C. ppm	Hard- ness as CaCO ₃ in ppm	Tur- bid- ity in ppm	Analyzed by
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)	Boron (B)	Silica (SiO ₂)					
10-10-63 1220	0.3	56	4.2	40	289	7.1																
11-7-63 0940	1	49	10.4	91	284	7.2																
12-10-63 1050	1	47	11.7	99	298	7.2																
1-14-64 1025	1	39	12.6	96	348	7.5																
3-24-64 1035	2	44	12.0	98	234	7.3																
4-21-64 1100	1.5	50	11.0	97	349	7.2																
5-12-64 1040	1	54	10.0	93	351	7.3																
6-25-64 1205	0.5	65	7.9	84	386	7.0																
7-21-64 1215	0.5	61	7.2	73	409	7.1																
8-18-64 1115	0.5	63	6.1	63	336	7.3																
9-23-64 0920	0.5	53	3.7	34	375	7.2																

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in eqm.

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e. Derived from conductivity vs TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i. Annual analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of day P.S.T.	Discharge Temp in cfe in cfe	Dissolved oxygen ppm	Specific conductance at 25°C μmhos/cm	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ ppm	Tur- bid- ity MPN/ml	Analyzed by			
				Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potash- ium (K)	Carbon- dioxide (CO ₂)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)					Boron (B)	Silica (SiO ₂)	Other constituents
10-3-63 1200	15 est.	73	9.6	112	359	7.9	0.48	7	186	7	0.23	3.05	0.0	0.0	12	174	10	1	62	USGS
11-7-63 1100	20 est.	59	9.2	92	334	7.2	0.41	0	168	0	0.00	2.75	0.2	0.2	6.2	157	19	220	620	
12-5-63 1410	15 est.	52	12.9	117	367	8.1	0.48	4	170	4	0.13	2.79	0.0	0.0	7.5	164	18	15	2.3	
1-9-64 1320	10 est.	50	11.9	106	349	8.4	0.48	10	159	10	0.20	2.61	0.0	0.0	7.0	166	19	3	4.6	
2-5-64 1215	5 est.	54	14.5	136	295	8.4	0.40	6	141	7.0	0.13	2.31	0.0	0.0	7.0	138	16	30	2.3	
3-4-64 1145	5 est.	58	16.5	163	299	8.4	0.44	10	134	4.5	0.33	2.20	0.1	0.1	4.5	140	14	15	6.2	
4-9-64 1415	5.0	67	17.0	186	298	8.4	0.44	9	136	5.5	0.30	2.23	0.1	0.1	5.5	140	14	7	6.2	
5-7-64 1045	18.9	58	11.8	116	306	8.2	0.40	33	13	9.3	1.0	2.47	0.1	17	6.0	138	14	2	6.2	
6-9-64 1215	22.7	62	10.3	106	312	8.1	0.44	3	136	2.6	0.03	2.47	0.1	17	1.9	150	16	7	6.2	
7-7-64 1500	15.7	79	10.3	128	333	8.4	0.48	3	165	0	0.17	2.70	0.1	17	5.5	158	14	10	62	
8-5-64 1220	2.2	83	13.1	168	345	8.4	0.47	12	160	14	0.47	2.62	0.1	16	6.0	165	11	2	230	
9-4-64 1110	4 est.	69	11.5	129	388	8.3	0.44	42	19	17	1.6	2.52	0.1	16	8.0	183	11	1	2.3	

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in ppm

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e. Derived from conductivity vs TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i. Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

3055-6-64 6-64 200

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sample collected P.S.T.	Discharge Temp in cfs in ft	Dissolved oxygen ppm	Specific conductance at 25°C $\frac{\mu\text{mhos}}{\text{cm}}$	Mineral constituents in parts per million										Total dis- solved solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Tot - Coliform bacteria MPN/ml	Analyzed by
				Calcium (Ca) (mg)	Sodium (Na) (mg)	Potash (K) (mg)	Carbon- dioxide (CO ₂) (mg)	Bicarbonate (HCO ₃) (mg)	Sul- fate (SO ₄) (mg)	Chlo- ride (Cl) (mg)	Ni- trate (NO ₃) (mg)	Fluo- ride (F) (mg)	Barium (Ba) (mg)				
ZAVANTE CREEK AT ZAVANTE (STA. 234)																	
10-8-63 1330	0.8	58	10.1	99	662	8.1 8.2	0 0.00	268 4.06	0	29 0.02	1.2 0.02			Fe = 0.62 Na = 0.00 PO ₄ = 0.31	435	260	
11-6-63 1110	4	52	10.2	92	481	7.9	0	162 2.33	0	19 0.04	1.6 0.03			Fe = 1.3 Na = 0.00 ABS = 0.0 PO ₄ = 0.61	315	181	
12-10-63 1420	2	42	11.9	94	631	7.9	0		0		0.0 0.00			PO ₄ = 0.32	415		
1-15-64 1230	1	40	13.4	103	653	8.1 8.2	0	230 3.77	0	27 0.06	0.6 0.01			PO ₄ = 0.31	430	266	
2-20-64 0925	2	43			626	8.1	0	209 3.42	0	22 0.02	0.4 0.01			PO ₄ = 0.30	410	251	
3-25-64 1430	2	46	12.2	102	600	8.2 8.0	0	205 3.36	0	22 0.02	0.6 0.01			PO ₄ = 0.32	395	240	2.7
4-22-64 1330	1	53	11.6	106	664	8.4 8.1	0	236 3.87	0	36 1.02	1.8 0.03			Fe = 0.08 PO = 0.34	435	261	2.2
5-13-64 1330	1.5	58	10.8	105	672	8.4 8.2	4	242 0.13	5	31 0.07	0.2 0.00			PO ₄ = 0.40	440	266	0.5
6-23-64 1330	1.5	67	9.0	97	686	7.9 8.3	0	256 4.20	0	33 0.93	0.9 0.01			PO ₄ = 0.37	450	269	2.5
7-22-64 0830	1	58	9.8	96	733	7.7 8.4	4	267 0.13	4	37 1.04	1.0 0.02			PO ₄ = 0.50	480	280	0.2
8-18-64 0740	1	56	9.6	91	754	8.1				42 1.18	0.6 0.01			ABS = 0.0 PO ₄ = 0.51	495		3.6
9-23-64 1530	0.8	63	9.0	93	775	8.3				46 1.30	1.8 0.03			PO ₄ = 0.51	510	301	0.5

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively

i Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

j Analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DMR), as indicated.

k Analyses made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

l Analyses made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

m Analyses made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

n Analyses made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge in cfs in P.S.T.	Temp in °F	Dissolved oxygen in ppm	Specific conductance at 25°C in %NaCl	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Percent solids in ppm	Hardness as CaCO ₃ Total in ppm	Turbidity in m/m	Analyzed by		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Silica (SiO ₂)	Other constituents
NEVEL CREEK ONE MILE EAST OF BEN LOMOND (STA. 219)																						
10-8-63 1025	1	64	8.6	90	557	7.6 7.9	4,736c	25 1,09	0	132 0,00	2,49	20 0,36	1,3 0,02	Fe = 0.46 Mn = 0.00 PO ₄ = 0.16 Color = 10 Fe = 0.51 PO ₄ = 0.30	228		DNR					
12-5-63 1340	1	51	9.9	89	562	7.3	4,786c	0	0	162 0,00	2,66	20 0,31	1,5 0,02	PO ₄ = 0.25	239							
1-15-64 0955	1	47	10.0	85	581	7.2	5,000c	0	0	164 0,00	2,69	18 0,31	0.9 0,01	PO ₄ = 0.16	232							
3-25-64 1130	1	53	10.9	100	562	7.7	4,786c	21 0,91	0	166 0,00	2,72	20 0,36	1.2 0,02	PO ₄ = 0.13	233							
6-22-64 1005	1	51	9.9	89	553	7.8 7.9	4,64c	0	0	162 0,00	2,66	18 0,31	0.5 0,01	PO ₄ = 0.21	228							
5-13-64 0945	1	58	9.6	94	553	7.7 8.0	4,66c	0	0	164 0,00	2,69	20 0,36	0.3 0,00	AMS = 0.0 PO ₄ = 0.29	244		DNR					
6-26-64 0805	1	54	9.9	92	552	7.3 8.1	4,66c	21 0,91	0	166 0,00	2,72	20 0,36	1.2 0,02	PO ₄ = 0.99	265							
7-21-64 1310	1	58	10.0	98	538	7.4 8.1	4,56c	0	0	162 0,00	2,66	18 0,31	0.0 0,00		240							
8-18-64 0910	1	55	9.8	92	571	7.4																
9-22-64 1040	1	53	8.8	81	574	6.0	4,886c															
LOVE CREEK AT BEN LOMOND (STA. 216)																						
10-8-63 0930	0.3	57	9.5	92	106	7.9									265							
11-7-63 1200	0.5	49	10.6	92	366	7.6									240							

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), repr

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

j Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

k Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

l Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

m Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

n Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

o Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

p Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

q Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

r Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

s Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

t Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

u Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge in cfs in 1977	Dissolved oxygen in % sat	Specific conductance at 25°C	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Per- cent as CaCO_3 in ppm	Hardness as CaCO_3 in ppm	Tur- bid- ity in ppm	Analyzed by
					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sum (K)	Carbon- ate (CO_3)	Bicar- bonate (HCO_3)	Sul- fate (SO_4)	Chlo- ride (Cl)	No- trate (NO_3)	Flu- oride (F)	Boron (B)	Other constituents			
LOVE CREEK AT BEN LORINO (STA. 216)																			
12-10-63 1225	0.3	44	11.6	94						14.0		22	0.7				24.0		
1-15-64 0930	0.3	38	12.7	95		2.94e			0.700	2.29		0.62	0.01			$\text{PO}_4 = 0.59$	255	147	
2-18-64 1220	0.5	46		361		2.776e			0.700	2.11		0.51	0.02			Color = 0 $\text{PO}_4 = 0.55$	235	137	
3-25-64 1100	0.5	44	12.6	103		2.586e			0.700	2.02		1.7	0.48	0.02		$\text{PO}_4 = 0.51$	220	128	4.5
4-22-64 0935	0.3	49	11.5	100		2.94e			0.700	2.39		2.1	0.2			$\text{PO}_4 = 0.52$	255	147	0.7
5-13-64 0930	0.3	53	10.4	95		2.906e			0.700	2.31		0.02	0.1	0.00		$\text{PO}_4 = 0.75$	265	148	0.4
7-21-64 1300	0.3	60	9.1	91		3.30e			0.700	2.79		0.70	0.0	0.00		$\text{PO}_4 = 0.74$ ARS = 0.0 $\text{PO}_4 = 0.85$	285	165	0.6
8-18-64 0850	0.3	58	9.2	90								25	0.5				305		1.5
9-23-64 1330	Dry											0.770	0.01						
MARSHALL CREEK (STA. 254)																			
10-10-63 1300	0.2	59	9.8	97															
11-7-63 1110	0.5	51	10.5	94															
12-10-63 1305	0.3	47	11.1	94															

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in eqm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time analyzed PST	Dissolved oxygen in % in air	Specific conductance (microhm/cm at 25°C) a	Mineral constituents in equivalents per million							Total solids in ppm	Percent solids in ppm	Hardness as CaCO ₃ ppm	Turbidity in NTU	Analyzed by
			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Silica (SiO ₂)	
1-15-64 0910	0.3	4.3	12.2	98										DNR
3-25-64 1030	0.5	46	11.8	99										
4-22-64 0910	0.5	48	11.4	98										
5-13-64 0910	0.5	51	10.8	97										
9-23-64 1317	0.3	59	9.8	97										
10-8-63 1415	0.3	58	9.8	96										
11-6-63 1145	1	52	10.2	92										
12-11-63 1125	1	41	12.0	94										
1-15-64 1230	0.3	61	12.6	98										
2-20-64 1000	0.5	45												
3-25-64 1400	0.8	48	12.2	105										DNR
4-22-64 1300	0.5	52	11.6	105										

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in eqm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWD), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL)

j California Department of Water Resources (DWR), as indicated

3-25-64 6-4 20 JN

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (CO, 3)

Date and time sampled P.S.T.	Oscillograph Trace in cm. in log ppm	Specific Conductance (micro-mhos/cm at 25°C) p.p.h.	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Total Coliform ^b MPN/ml	Analyzed by ⁱ								
			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)	Other constituents					
LOFTOUG CREEK ONE MILE NORTH OF OLIMPIC (STA. 215)																								
5-13-64 1310	0.3	54	10.9	101	517	8.2	4.42c	24.7	0.00	2.0	0.7							330	221					DR
7-27-64 0850	0.5	56	9.1	87	614	7.7	5.38c	314	0.00	0.56	1.2							395	270					
8-18-64 0715	0.5	56	9.2	88	644	8.2		5.15	0.00	0.59	0.02							415						
9-23-64 1515	0.5	60	9.3	93	649	8.1	5.87c	21	0.00	0.59	0.01							415	294					
FALL CREEK ONE-HALF MILE NORTH OF FELDON (STA. 211)																								
10-8-63 1115	2	56	10.0	95	270	7.9				7.8	0.2							175						DR
11-7-63 1430	2	52	10.8	98	254	8.1				0.22	0.00							165						
12-11-63 1225	1.5	45	11.8	97	260	7.9				8.5	0.8							165						
1-15-64 1020	2	43	12.3	99	258	8.0	2.28c	130	0.00	0.22	0.00							165	114					
3-25-64 1215	1.5	47	12.1	103	235	8.0	2.02c	11.7	0.00	0.24	0.01							150	101					
4-22-64 1045	2	49	11.3	98	256	7.9	2.22c	132	0.00	8.2	0.0							165	111					
5-13-64 0945	2.5	51	11.0	98	258	8.1	2.28c	136	0.00	8.4	0.1							165	114					
7-22-64 0955	2.5	56	10.1	96	286	8.0	2.46c	140	0.00	8.4	0.6							185	123					
8-18-64 0830	2	55	10.3	97	284	8.0		113	0.00	8.3	0.1							183						

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gasometric determination

h Annual median and range, respectively

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), Metropolitan Water District of Southern California (MWD), Los Angeles District of Southern California (LADWP), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge Temp. in °F	Dissolved oxygen in ppm	Specific Conductance in micromhos/cm at 25°C	pH	Mineral constituents in equivalents per million										Total dissolved solid in ppm	Hardness as CaCO ₃ Total in ppm	Turbidity in NTU	Color in PCU	Analyzed by	
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO ₃)	Bicarbonates (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron (B)
9-23-64 1340	2	59	9.9	98	303	7.9							1.0	0.7				128	0.2	DNR
FALL CREEK ONE-HALF MILE NORTH OF FELTON (STA. 211)																				
						2.36c							0.28	0.01						
BEAN CREEK ONE MILE EAST OF FELTON (STA. 204)																				
10-8-63 1530	2	58	9.6	94	380	7.8	2.5	1.09	0.00	1.85	1.13	26	2.5					129		
						2.38c			0.00	1.73	1.06	0.73	0.06							
11-6-63 1030	8	53	10.0	92	334	7.6	1.9	0.85	0.00	1.39	0.56	1.9	2.0					114		
						2.28c	0.83													
12-11-63 1200	4	64	11.6	94	390	7.5			0.00	1.18	1.93	27	2.6					138		
						2.76c			0.00	1.76	0.06	0.76	0.06					141		
1-15-64 1130	4	64	11.7	95	393	7.4			0.00	1.20	1.97	26	1.7					136		
2-20-64 1040	4	68			399	7.8			0.00	1.90	0.65	0.68	0.03					141		
3-25-64 1340	4	52	10.9	99	386	7.8			0.00	1.16	2.3	2.6	2.0					136		
						2.72c			0.00	1.90	0.65	0.06	0.06					133		
4-22-64 1230	4	52	10.9	99	386	7.5			0.00	1.22	2.0	26	2.0					136	12	
						2.66c			0.00	1.90	0.65	0.73	0.03					133	14	
5-13-64 1245	3	53	10.3	95	392	7.8			0.00	1.22	2.06	28	1.5					136	7.5	
						2.72c			0.00	1.90	0.65	0.73	0.03					141	4.0	
6-23-64 1300	2.5	57	10.1	97	397	8.0			0.00	1.26	2.06	28	2.2					141	4.0	
						2.82c			0.00	1.90	0.65	0.73	0.03					143	2.0	
7-22-64 0920	2	64	8.9	93	409	7.5	2.3	1.00	0.00	1.26	2.06	28	2.2					143	2.0	
						2.86c			0.00	1.29	2.11	29	2.1					143	2.0	
8-18-64 0805	2.5	57	9.8	94	413	8.0			0.00	1.29	2.11	29	2.1					143	2.0	
						2.86c			0.00	1.29	2.11	29	2.1					143	2.0	
8-18-64 0805	2.5	55	10.2	96	417	7.8			0.00	1.26	2.06	28	2.0					143	3.2	
						2.86c			0.00	1.29	2.11	29	2.0					143	3.2	

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in eqm.

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e. Derived from conductivity vs TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i. Mineral analyses made by United States Geological Survey, Office of Water Branch, (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFC), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

j. 12/5/64-6/63 2/3 3/0 3/0

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time analyzed PST	Discharge Temp in °F	Dissolved oxygen ppm	Specific conductance at 25°C µmhos/cm	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Percent solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Turbidity MPN/ml	Analyzed by		
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron (B)	Silica (SiO ₂)
9-23-64 1455	2	60	9.7	97	408	7.8	2.78c						30	3.2	0.05			265	139	2.1	DRR
BEANI CREEK ONE MILE EAST OF FELTON (STA. 204)																					
10-8-63 1210	8	60	9.8	98	390	7.8	2.88c	22	0.96	0	163	2.34	22	1.2	0.02			240	144		DRR
11-6-63 0945	35	54	9.7	90	295	7.5	2.14c	16	0.70	0	76	1.24	16	1.8	0.03			185	107		
SAN LORENZO RIVER AT FELTON (STA. 229)																					
12-11-63 1030	30	42	12.0	95	375	7.4				0	137	2.24	20	0.5	0.01			235	146		
1-15-64 1050	25	42	13.7	108	391	7.8	2.92c			0	127	2.08	18	1.0	0.02			245	138		
2-19-64 1555	30	49	11.3	98	378	7.5	2.76c			0	115	1.88	17	1.1	0.02			235	138		
3-23-64 1230	35	50	12.3	109	349	7.9	2.54c			0	161	2.31	21	1.3	0.02			220	127	3.5	
4-22-64 1110	20	53	10.7	98	387	7.9	2.84c			0	142	2.33	22	0.3	0.02			240	142	8.0	
5-13-64 1045	18	52	10.1	92	394	7.9	2.88c			0	143	2.34	22	0.3	0.02			245	144	2.5	
6-23-64 1205	15	70	10.5	117	383	8.0	2.82c	21	0.91	0	163	2.36	22	1.2	0.02			240	141	2.0	
7-22-64 0800	18	61	7.3	74	380	7.3	2.80c			0	164	2.36	21	0.4	0.01			230	140	0.8	
8-17-64 1545	18	71	9.7	109	376	8.0				0	164	2.36	22	0.3	0.02			235	144	2.6	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (CDWR), as indicated

Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (CDWR), as indicated

Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (CDWR), as indicated

305-10-1 6-61 201 20

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date sampled P.S.T.	Discharge in cfs in °F	Temp in °F	Dissolved oxygen in ppm	Specific conductance (micro-mhos at 25°C)	pH	Mineral constituents in equivalents per million										Total diss. solids in ppm	Per- cent acid solu- ble	Hardness as CaCO ₃ Total N.C. Sum	Tur- bid- ity in MPN/ml	Analyzed by
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- dioxide (CO ₂)	Bicarbon- ate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluor- ide (F)	Boron (B)	Other constituents			
9-23-64 1410	16	67	9.8	166	386	2.776							2.6 0.79	0.7			NO ₃ = 0.60	136	1.8	DHR
10-8-63 1230	3	59	10.6	103	383	2.786	2.5	1.09		0.00	1.26	2.6 0.68	1.8 0.73				Fe = 0.32 Ni = 0.00 NO ₃ = 0.69	128		DHR
11-6-63 0930	15	53	10.0	92	364	2.426	2.0	0.87		0.00	0.94	1.8 0.31	2.3 0.64				Fe = 0.73 Ni = 0.00 ABS = 0.0 NO ₃ = 1.1	121		
12-11-63 1005	8	42	12.3	97	410	2.8							2.0 0.53				NO ₃ = 0.71	265		
1-15-64 1105	6	41	13.6	106	403	2.946				0.00	1.31	2.3 0.65	1.8 0.73				NO ₃ = 0.78 Color = 0	167		
2-19-64 1605	8	53	10.7	98	417	3.026				0.00	1.30	2.2 0.62	1.3 0.72				NO ₃ = 0.77	151		
3-25-64 1200	8	51	11.8	106	415	3.026				0.00	1.31	2.2 0.62	1.3 0.74				NO ₃ = 0.77	151	4.4	
4-22-64 1135	6	53	11.2	103	382	2.846				0.00	1.26	2.2 0.62	1.8 0.73				Fe = 0.24 NO ₃ = 1.1	132	33	
5-13-64 1100	8	55	10.6	100	402	2.846				0.00	1.34	2.5 0.70	1.0 0.72				NO ₃ = 0.88	142	3.5	
6-23-64 1210	7	68	9.5	104	404	2.846	2.6	1.04		0.00	1.36	2.8 0.79	1.6 0.53				NO ₃ = 0.90	142	3.0	
7-22-64 0730	8	59	9.9	98	397	2.766				0.00	1.32	2.7 0.76	1.1 0.62				NO ₃ = 0.93 ABS = 0.0	138	1.5	
8-12-64 1530	8	66	9.5	102	412					0.00	2.16	3.0 0.85	1.5 0.62				NO ₃ = 0.94	265	2.9	
9-23-64 1423	8	62	9.7	98	386	2.786						2.8 0.82	2.3 0.64				NO ₃ = 1.0	139	1.2	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs. TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analysis of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood

Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of

Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

1-5-64-104-1-20-20

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of day and PST	Discharge in cfs	Temp in °F	Dissolved oxygen in %	Specific Conductance at 25°C in micromhos/cm	Mineral constituents in parts per million												Total dissolved solids in ppm	Percent solids as CaCO ₃ in ppm	Hardness as CaCO ₃ in ppm	Turbidity in NTU	Coliforms per 100 ml	Analyzed by	
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)							Other constituents
SAN LORENZO RIVER AT BIG TREES (STA. 226)																							
10-8-63 1430	12	60	9.7	97														240			DMR		
				386																			
11-7-63 1505	56	52	9.4	85														215					
12-11-63 0910	51	40	11.8	91														220					
1-15-64 1400	36	45	13.3	110														236					
3-25-64 1515	56	53	11.2	103														220	5.0				
6-22-64 1430	33	59	10.4	103														235	7.5				
5-13-64 1515	27		10.1															240	2.8				
SAN LORENZO RIVER AT BIG TREES (STA. 75)																							
10-3-63 1745	12	62	8.8	91														25	139	20		23	USGS
				372		2.78c	2.1		2	141	5.31	24	0.68			0.0				1			
11-8-63 1230	45	55	10.4	99					0	122	2.00	20				0.1							
				356		2.64c	0.87		0	122	2.00	20				0.1							
12-4-63 1740	53	46	12.9	108					0	135	2.11	19				0.0							
				363		2.78c	0.74		0	135	2.11	19				0.0							
1-7-64 1240	35	49	13.2	116					6	128	2.00	26	0.76			0.1							
				370		2.78c	1.04		0	128	2.00	26	0.76			0.1							
2-6-64 1245	77	50	11.6	103					7	116	1.87	19				0.1							
				360		2.76c	0.96		0	128	2.00	26	0.76			0.1							
3-5-64 1330	44	54	11.2	105					0	133	2.18	22				0.1							
				375		2.84c	0.97		0	133	2.18	22				0.1							

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in ppm.

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e. Derived from conductivity vs TDS curves.

f. Determined by addition of analyzed constituents.

g. Gravimetric determination.

h. Annual median and range.

i. Analytical Laboratory.

j. Central Point (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Long Beach, California.

k. Public Health (LBPHD), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

l. San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Long Beach, California.

m. San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Long Beach, California.

n. San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Long Beach, California.

o. San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Long Beach, California.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge in cfs in m ³ /sec	Dissolved oxygen in ppm	Specific Conductance at 25°C in μ mhos/cm	Mineral constituents in parts per million										Total dissolved solids in ppm	Percent solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Turbidity MPN/ml	Analyzed by			
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron (B)	Silica (SiO ₂)	Other constituents
SAN LORENZO RIVER AT BIG TREES (STA. 75)																					
4-7-64 1215	40	61	11.0	112	373	8.0	8.3	2.74e	23	1.00	0.1	1.32	2.0	0.56	0.1	27	137	27	2	2.3	USGS
5-6-64 0920	30	52	11.2	102	379	7.8	7.8	2.10	22	0.74	0.00	1.41	23	0.66	0.1	239	142	26	1	23.	
6-10-64 1215	31	60	10.1	102	389	8.0	8.5	2.98e	24	1.04	0.17	1.34	24	0.68	0.1	26	149	31	1	50.	
7-8-64 1120	17	70	10.5	119	372	8.2	8.2	2.76e	22	0.96	0.00	1.42	25	0.71	0.1	26	138	22	10	6.2	
8-6-64 1140	11	73	10.1	118	398	8.1	8.1	2.66e	22	0.96	0.00	1.38	23	0.65	0.1	27	133	20	4	62.	
9-3-64 1055	13	63	10.7	112	366	8.0	8.0	1.75	14	0.71	0.00	1.39	24	0.61	0.1	230	131	17	1	6.2	
BRANIFF CREEK NEAR SANTA CRUZ (STA. 209)																					
11-6-63 0735	8	54	10.3	96	351	7.2	7.1	1.98e	18	0.78	0.00	0.56	25	1.3	0.1						DNR
12-13-63 0845	3	38	12.0	90	583	7.9	8.1	2.75e	33	1.44	0.00	2.88	31	0.87	0.1						
1-16-64 1040	1.5	40	14.2	109	614	8.2	8.2	4.84e	41	1.78	0.00	2.32	32	0.6	0.1						
3-26-64 1500	5	55	10.3	493	739	8.3	8.3	3.64e	26	0.96	0.00	1.29	28	0.79	0.1						
5-16-64 1430	1.5	58	11.0	107	641	8.2	8.2	4.96e	35	1.72	0.00	2.63	35	1.7	0.1						
6-23-64 0730	1	58	8.9	87	669	7.6	7.6	5.17e	41	1.78	0.00	2.84	36	2.0	0.1						
7-22-64 1230	0.5	65	10.8	114	678	7.6	7.6	5.31e	37	1.0	0.00	4.65	37	1.0	0.1						

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in ppm

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 except as shown

e. Derived from conductivity vs TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i. Mineral analyses from the United States Geological Survey, Office of Water Branch, (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood

Control District (SBCFD), Southern California Water District of Southern California (SWD), Los Angeles Department of Water and Power (LADWP), City of Long Beach, Department of

Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

125-5484-1-20, 21, 22

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time analyzed and P.S.T.	Discharge Temp. in cts	Dissolved oxygen ppm	Specific Conductance at 25°C in μ mhos/cm	Mineral constituents in parts per million											Total dissolved solids in ppm	Hardness as CaCO_3 Total N.C. ppm	Total dissolved solids - by 1	Analyzed by 1
				equivalents per million														
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)				
BIANCORTE CREEK NEAR SANTA CRUZ (STA. 209)																		
8-17-64 1405	0.8	6.5	11.4	120								36 1.02	0.6 0.01				ABS = 0.0 $\text{Fe} = 0.80$	2.4
9-23-64 1010	0.8	6.0	9.3	93	5.55c							39 1.10	3.0 0.05				$\text{Fe} = 0.93$	2.1
BIANCORTE CREEK (STA. 248)																		
10-7-63 1330	1.4	6.3	10.5	109	547							32 0.90	1.2 0.02				$\text{Fe} = 0.50$ $\text{Fe} = 0.71$	198
11-6-63 0725	1.5	5.4	9.3	86	356							25 0.70	5.5 0.09				$\text{Fe} = 0.88$ ABS = 0.0 $\text{Fe} = 0.90$	116
12-10-63 0800	5.6	4.2	10.9	86	356							5.8 0.09					$\text{Fe} = 0.44$	250
1-16-64 0930	3.2	4.0	13.4	103	486							28 0.79	1.9 0.03				ABS = 0.0 $\text{Fe} = 0.34$	175
2-20-64 1400	4.2	5.4			417							25 0.70	3.4 0.05				Color = 5 $\text{Fe} = 0.45$	166
3-26-64 1430	7.7	5.6	11.1	66	416							26 0.73	4.9 0.08				$\text{Fe} = 0.54$	143
4-23-64 1515	3.2	5.4	11.3	105	497							29 0.82	1.5 0.02				$\text{Fe} = 0.50$	178
5-14-64 1410	2.4	6.0	11.0	110	526							35 0.99	1.5 0.02				$\text{Fe} = 0.42$	193
6-23-64 0700	1.4	5.8	8.7	85	572							34 0.96	1.1 0.02				$\text{Fe} = 0.67$	212
7-22-64 1215	0.8	6.7	10.7	116	580							34 0.96	1.4 0.02				$\text{Fe} = 0.68$	212

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{6+}) reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i General analyses (SOPF CO) by United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District, and Southern California Water District (SWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL) or California Department of Water Resources (DWR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Ounces in 24 in 24	Temp in °F	Dissolved oxygen in %	Specific Conductance at 25°C	Mineral constituents in parts per million										Total dissolved in ppm	Hardness as CaCO ₃ Total in ppm	Tur- bidity in ppm	Coliforms MPN/ml	Analyzed by
					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)	Boron (B)	Silica (SiO ₂)			
8-17-64 1350	1.2	66	10.6	113	611													1.9	DNR
9-26-64 0945	0.9	61	9.1	92	668	5.096												4.0	
1-16-64 1020	2	40	13.4	103	312														DNR
2-20-64 1345	2	53		315	7.9	2.006													
3-26-64 1500	2.5			320															
5-16-64 1455	0.8	61	10.0	101	314	1.826												4.0	
6-23-64 0720	0.5	58	9.0	88	325	1.886	1.004											3.5	
7-22-64 1220	0.3	66	9.9	106	330	1.766												2.3	
8-12-64 1330	0.3	67	9.4	102	350													1.5	
9-23-64 1000	0.3	60	7.8	78	383	1.966												3.6	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFCFD), Mendocino Water District (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

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TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL OASTAL REGION (NO. 3)

Date and time of day and P.S.T.	Discharge Temp. in cfs	Dissolved oxygen in cfs ppm	Specific Conductance at 25°C in micromhos/cm	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ in ppm	Total N.C. in ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by					
				equivalents per million																				
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)							Boron (B)	Silica (SiO ₂)	Other constituents		
SOQUEL CREEK AT SOQUEL (STA. 76)																								
10-3-63 1700	4.5	68	8.4	91	787	8.1	8.2	50 3.96	10 0.33	236 3.87	65 1.03							27	298	88	2	62	62	USGS
11-8-63 1122	8.0	57	10.9	105	750	7.6	8.2	49 3.76	0	225 3.69	55 1.35				0.1			27	288	104	10	23	62	
12-4-63 1700	13	50	10.9	96	716	8.2	8.3	46 3.58	8	220 3.61	42 1.18				0.1			26	290	96	2	6.2	6.2	
1-7-64 1330	9.0	54	12.0	111	778	8.4	8.7	15 5.76	17 0.57	217 3.56	58 1.04				0.1			10	288	82	5	6.2	6.2	
2-6-64 1430	19	56	11.0	105	650	8.3	8.6	41 3.24	17 0.57	182 2.98	36 1.02				0.2			25	262	85	10	13	13	
3-5-64 1515	13	58	10.6	103	717	8.4	8.6	43 3.86	11 0.37	216 3.54	48 1.35				0.2			24	293	98	10	21	21	
4-7-64 1310	11	64	7.6	79	720	8.4	8.7	48 5.60	12 0.40	214 3.51	48 1.35				0.1			27	280	85	1	62	62	
5-6-64 0800	5.2	52	11.6	105	774	8.0	8.5	52 3.99	4 0.13	242 3.97	58 1.64	0.6 0.01			0.1 0.02	As = 0.00 ABS = 0.0 Fe ₂ = 0.24	502	27	294	89	1	23	62	
6-10-64 1310	1.2	64	10.3	107	768	8.4	8.6	60 3.86	11 0.37	217 3.56	62 1.75				0.1			32	283	87	0	50	50	
7-8-64 1220	1.7	77	11.8	141	780	8.4	8.6	51 6.08	14 0.47	226 3.70	67 1.89				0.1			27	304	96	2	62	62	
8-6-64 1230	1.7	77	13.3	159	746	8.4	8.5	45 5.92	4 0.13	240 3.93	58 1.64				0.1			25	296	93	3	13	13	
9-2-64 0955	2.4	63	10.9	112	755	8.2	8.1	44 3.74	0 0.00	252 4.13	62 1.75	0.5 0.01			0.2 0.02	As = 0.00 ABS = 0.0 Fe ₂ = 0.35	488	24	298	91	2	13	13	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{VI}), reported here as 0.0 except as shown. 0.00

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality Assurance Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Lamont Testing Laboratories, Inc. (ITL), or California Department of Water Resources (DWR), as indicated.

TABLE D-2 ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time analyzed P.S.T.	Oscilloscope Temp in c/c	Dissolved oxygen ppm	Specific conductance at 25°C μmho/cm	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ ppm	Total N.C. ppm	Turbid- ity MPN/ml	Analyzed by			
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Nit- rate (NO ₃)	Fluo- ride (F)						Boron (B)	Silica (SiO ₂)	Other constituents

| SAN LORENZO RIVER AT SANTA CRUZ (STA. 230) | | | | | | | | | | | | | | | | | | |
| 10-10-63 1600 | 15 | 62 | 11.3 | 115 | 388 | 8.3 7.9 | 2.83c 1.90 | 23 | 0 | 0.00 | 141 2.31 | 22 0.62 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.01 | 0.9 0.0 |

o Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents
g Gravimetric determination
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of San Bernardino County Flood Control Districts made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); San Bernardino County Flood Control Districts made by United States Geological Survey, Quality of Water Branch (USGS); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DMR), as indicated.

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of day and P.S.T.	Discharge Temp in cfs in °F	Dissolved oxygen in ppm	Specific conductance in micromhos at 25°C in $\frac{\mu}{\text{cm}}$	Mineral constituents in parts per million										Total dissolved in ppm	Hardness as CaCO_3 Total ppm	Turbidity nephelometric units	Analyzed by					
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbon-dioxide (CO_2)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)					Boron (B)	Silica (SiO_2)	Other constituents		
8-3-64 1535	73	9.0	104	41	87	655	21	32	250	400	566	0.4	SALINAS RIVER MILE 0.00 (STA. 264)				1820	67	460	202	90	DWR
8-4-64 0645	69	3.1	34	2.1	7.15	19.79	0.54	1.07	4.10	8.33	15.97	0.01	ABS = 0.2									Field determinations
9-17-64 0650	63	11.3	117										SALINAS RIVER MILE 1.70 (STA. 263)						460	100		Field determinations
9-17-64 1540	68	21.0	230								568											Field determinations
8-3-64 1650	75	17.3	203	47	76	348	15	41	261	373	372	0.2	ABS = 0.3				1470	63	431	149	100	DWR
8-4-64 0640	69	12.5	138					1.37	4.28	7.76	10.49	0.00										Field determinations
9-17-64 0630	64	16.5	171																			Field determinations
9-17-64 1610	69	32.2	355	9.4	78	312	14	20	404	304	338	12	ABS = 0.6				1400	57	499	134	100	DWR
8-3-64 1715	3	70	3580	8.6	3.89	6.08	0.36	0.67	6.62	6.33	9.25	0.19	ABS = 0.1				2580	50	996	467	60	DWR
9-17-64 0330	3	71	5.8	59									SLANCO DRAIN INTO SALINAS RIVER (STA. 246)									Field determinations

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of Salinas River monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Annual median and range, respectively. Calculated from analyses of San Joaquin River monthly samples made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

105-106-1-1, 1A

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date sampled P.S.T.	Discharge in cfs	Dissolved oxygen in mg per 100 ml	Specific conductance in μ mhos at 25°C	Mineral constituents in equivalents per million										Total solids in ppm	Hardness in ppm as CaCO ₃	Turbid- ity in ppm	Analyzed by
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Cobalt- chloride (CoCl ₂)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Other constituents		
9-17-64 1353	3	65	8.7	92													Field determinations
8-3-64 1315		71	16.8	190	2000												Field determinations
8-4-64 0335		69	23.5	259													Field determinations
9-17-64 0407		65	12.1	128													Field determinations
9-17-64 1445		67	17.7	191	1995												Field determinations
8-3-64 1820		75	18.8	221	1680												Field determinations
8-4-64 0300		70	11.5	128													Field determinations
9-17-64 0345		63	4.5	47													Field determinations
9-17-64 1410		68	10.6	116	1575												Field determinations

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in ppm

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e. Derived from conductivity vs TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i. Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood

Central District (SBFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of

Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

325-5-64-1 6-41 20 20

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge Temp in cfs	Dissolved oxygen ppm	Specific conductance micromhos at 25°C	pH	Mineral constituents in parts per million										Total dis- solved solids in ppm	Per- cent sol- ids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Tur- bid- ity MPN/ml in ppm	Analyzed by		
					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluor- ine (F)						Baron (B)	Silica (SiO ₂)
8-3-64 1800	72	5.5	63	7.4 8.2	97 4.84	4.9 4.05	166 7.22	14 0.38	0 0.00	439 7.20	161 3.35	211 5.95	27 0.44		ABS = 3.1	988	44	445	88	50	Field determi- nation
8-4-64 0230	67	0.6	6	7.7																	Field determi- nation
9-17-64 0310	65	0.9	9	7.5								235						385	20		Field determi- nation
9-17-64 1332	69	4.9	54	7.6																	Field determi- nation
8-3-64 1250	71	0.0	0	7.4 8.1	80 3.99	41 3.38	160 6.96	16 0.41	0 0.00	426 6.98	111 2.31	224 6.32	33 0.05		ABS = 4.9	882	47	369	20	40	Field determi- nation
8-4-64 0200	69	2.5	28	7.2																	Field determi- nation
9-17-64 0250	67	0.3	3	7.4																	Field determi- nation
9-17-64 1307	68	0.0	0	7.3								235						350	4.2		Field determi- nation

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Actual median and range, respectively

i Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

j Analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood

Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water Resources (LADWR), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of

Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

5-5-64-64 1-4-2 20 20

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date and time of day and P.S.T.	Discharge Temp in cfs in °F	Dissolved oxygen in ppm %Sat	Specific conductance in micromhos at 25°C pH ±	Mineral constituents in parts per million										Total dissolved solids in ppm	Penetration test on CaCO ₃ Total N.C. ppm	Turbidity in MPN/ml	Analyzed by			
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)	Other constituents
SALINAS RIVER NEAR SPRECKELS (STA. 43)																				
10-2-63 1345	7.0	68	4.4	48	7.4	8.4	12.2	3.31	4.62	9.27	11.5	4.09	0.2	35	494	0	15	62		
11-7-63 0845	26	55	1.6	15	881	7.2	8.0	53	6.16c	2.31	0	356	5.83	27	308	16	1	230		
12-4-63 1530	64	52	8.1	73	654	7.6	8.0	41	1.778	0	232	37	1.762	26	256	49	15	23		
1-7-64 1345	40	56	15.5	147	738	8.2	8.4	46	2.00	16	247	52	0.2	26	278	49	10	23		
2-6-64 1630	450	54	11.1	103	352	8.1	7.8	16	0	163	0.70	13	0.0	19	146	29	40	62		
3-4-64 1430	6.5	59	7.9	78	1620	7.9	8.2	96	4.18	0	758	138	0.4	25	618	0	70	21		
4-7-64 1540	7.4	65	11.7	123	1630	7.8	8.3	132	5.74	6	722	148	0.4	33	578	0	10	62		
5-7-64 0820	4.9	58	1.6	16	1590	7.5	7.5	38	0.686	53	152	45	0.9	966	33	530	0	4	230	
6-10-64 1520	0.6	70	7.8	87	1380	7.4	7.8	398	156	0	398	168	0.5	48	370	44	3	230		
7-8-64 1450	0.8	75	8.9	104	1140	7.3	7.3	135	5.206	0	196	132	0.4	53	260	99	3	2400		
8-6-64 1450	1.0	77	6.3	75	1150	7.4	7.4	135	5.286	0	218	160	0.5	53	264	85	10	7000		
9-4-64 0850	0.6	64	1.7	18	1080	7.1	7.1	37	36	0	200	102	0.4	52	As = 0.01 ABS = 6.9 PO ₄ = 47	690	53	235	7	23

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity, vs. TDS curves

f Determined by addition of analyzed constituents

g Geometric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service (USPHS). San Bernardino County Flood Control District (SBCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DMR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of day P.S.T.	Oxygen Temp in cts	Dissolved oxygen ppm	Specific conductance at 25°C μ mhos/cm	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total in ppm	Total non-carbonate hardness in ppm	Analyzed by		
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)					Silica (SiO ₂)	Other constituents
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION (STA. 77a)																			
10-3-63	0.2 78	9.4 117	1960	8.4	11,206	234	20	464	138					48	560	147	1	6.2	USCS
11-6-63	0.2 62	15.3 161	3150	8.2	16,006	415	69	470	304					53	800	300	2	13.	
12-5-63	7.0 49	11.6 104.2	1370	8.5	10,366	128	18	498	70					35	518	80	20	6.2	
1-9-64	4.5 52	11.8 110	1510	8.4	10,246	150	22	458	92					39	512	100	2	2.3	
2-5-64	6.2 54	10.0 96	1390	8.4	10,086	133	39	436	78					36	504	81	50	6.2	
3-3-64	4.2 61	10.2 106	1520	8.6	11,086	149	31	480	92					37	554	108	10	6.2	
4-9-64	6.4 72	10.0 118	1410	8.3	9,326	142	20	466	81					40	466	51	25	2.3	
5-5-64	3.9 62	10.5 111	1540	8.4	1,355	31	2.6	506	86	0.9	0.2		As = 0.00 ABS = 0.0 Fe ₂ = 0.00	995	38	545	91	4	13.
6-9-64	0.9 67	10.2 114	1970	8.6	11,886	226	41	474	140					45	594	136	0	6.2	
7-2-64	0.1 80	8.9 113	2100	8.4	11,046	272	23	452	165					52	552	135	1	6.2	
8-5-64	0.03 80	12.4 158	2010	8.4	11,926	244	41	488	160					47	596	127	3	2.3	
9-2-64	0.1 75	12.5 152	2740	8.4	137	35	4.4	560	255				As = 0.00 ABS = 0.1 Fe ₂ = 0.05	1880	50	756	248	1	6.2

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{++}), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i. Analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

325-441 (NOV. 27) 40

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge Temp in °F	Dissolved oxygen ppm	Specific conductance at 25°C	pH a, b	Mineral constituents in micrograms per milliliter												Total dis- solved sol- ids in ppm	Pen- um in ppm	Hardness as CaCO ₃ ppm	Tot- aly ppm	Coli- form MPN/ml	Analyzed by
					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potash- sum (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluor- ide (F)	Boron (B)	Silica (SiO ₂)						
CARCEL RIVER AT ROBLES DEL RIO (STA. 83)																						
10-2-63	2.4	6.3	8.6	96	4.39	7.6	7.6	0.00	1.52	0.00	2.5	0.71	0.0	0.0	0.0	26	160	35	1	230	23.	
11-8-63	14	56	10.0	96	382	7.4	7.4	0.00	1.30	0.00	18	0.31	0.0	0.0	0.0	23	149	26	5	6.2	6.2	
12-4-63	28	54	10.4	97	311	7.6	7.6	0.00	1.22	0.00	14	0.39	0.0	0.0	0.0	23	122	22	2	13.	6.2	
1-2-64	16	54	11.8	110	348	8.3	8.3	0.13	1.21	0.00	20	0.36	0.0	0.0	0.0	25	129	23	1	2.3	0.62	
2-6-64	73	50	10.8	96	221	8.0	8.0	0.00	1.76	0.00	9.5	0.27	0.0	0.0	0.0	9	88	11	1	2.3	2.3	
3-4-64	23	55	11.2	106	275	8.2	8.2	0.10	1.74	0.00	15	0.42	0.1	0.1	0.1	23	108	16	2	6.2	6.2	
4-2-64	48	60	11.0	111	269	8.2	8.2	0.00	1.07	0.00	11	0.31	0.0	0.0	0.0	22	102	14	0	2.3	2.3	
5-7-64	29	52	10.6	97	286	6.8	6.8	0.00	1.13	0.00	14	0.39	0.2	0.2	0.2	180	22	108	15	1	6.2	
6-10-64	14	69	10.6	119	289	8.4	8.4	0.07	1.87	0.00	13	0.37	0.2	0.2	0.2	25	107	10	0	5.	6.2	
7-8-64	0.1	76	13.2	159	456	8.0	8.0	0.10	2.36	0.00	23	0.65	0.0	0.0	0.0	26	175	52	3	23.	23	
8-6-64	DRY																					
9-4-64	DRY																					

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in ppm

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e. Determined by addition of analyzed constituents.

f. Determined by titration

g. Gravimetric determination

h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i. Annual analyses by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

3202-1-61 (4-2) 200

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen in ppm	Specific conductance at 25°C in μ mhos/cm	Mineral constituents in parts per million												Total dissolved solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Temp. in °F	Coliform bacteria per 100 ml	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbon- dioxide (CO ₂)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)					
SALINAS RIVER NEAR BRADLEY (STA. 43c)																					
10-2-63	390	69	8.8	99	7.8	2.64c	16	0	0.00	146	0	9.3	0.28	0.0	0.0	21	132	12	1	4.62	USGS
11-6-63	169	58	9.7	96	7.5	2.80c	13	0	0.00	143	0	8.5	0.24	0.1	0.1	17	140	23	3	6.2	
12-2-63	193	56	10.1	97	8.1	3.12c	20	2	0.07	156	0	11	0.31	0.1	0.1	22	156	25	5	2.3	
1-8-64	165	48	10.8	94	8.2	2.46c	19	6	0.14	141	0	11	0.31	0.0	0.0	22	148	23	10	2.3	
2-4-64	694	53	10.6	99	7.7	2.30c	11	0	0.00	117	0	6.5	0.18	0.0	0.0	17	115	19	10	6.2	
3-2-64	42	63	10.5	110	8.5	4.98c	34	9	0.19	197	0	28	0.79	0.2	0.2	23	249	74	10	6.2	
4-8-64	177	65	9.3	100	8.2	3.02c	17	4	0.14	161	0	11	0.31	0.1	0.1	20	151	29	2	5	
5-5-64	263	56	10.2	99	8.0	1.3	11	1.6	0.00	130	33	7.3	0.21	0.1	0.1	16	126	19	4	2.3	
6-11-64	405	60	10.5	107	8.0	2.48c	12	2	0.07	127	0	3.5	0.10	0.0	0.0	17	124	17	2	6.2	
7-9-64	465	71	6.5	75	8.2	2.46c	11	1	0.03	130	0	5.5	0.16	0.1	0.1	16	124	16	3	6.2	
8-5-64	576	62	9.5	99	7.8	2.58c	11	0	0.00	138	0	5.5	0.16	0.1	0.1	16	129	16	2	6.2	
9-2-64	546	61	9.3	96	7.8	1.10	10	1.9	0.00	142	30	5.8	0.9	0.1	0.1	14	135	19	4	6.2	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown 0.00

e Derived from conductivity vs. TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses (Al, arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown 0.00) from analyses of surface water by the California Department of Public Health, Division of Laboratories, or United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

10-5-64 10-2-64 20

TABLE D-2

[illegible]

b Laboratory pH.

$$f(\mathbf{x}) = \sum_{i=1}^n \lambda_i \mathbf{x}_i^T \mathbf{x} + \frac{1}{2} \mathbf{x}^T \mathbf{A} \mathbf{x} - \mathbf{b}^T \mathbf{x} + c$$

e Derived from conductivity vs IDS curves

9 Gravimetric determination.

Annual Median and Range, 1990-1999

Control District (SBCFCD)
Bldg # 910-11-111
Bldg # 910-11-111

0

●●●

• Gravimetric determination.

^b Annual median and range, respectively. Calculated from analyses of appropriate monitoring samples. ^c Carried over separately. ^d ^e ^f ^g ^h ⁱ ^j ^k ^l ^m ⁿ ^o ^p ^q ^r ^s ^t ^u ^v ^w ^x ^y ^z ^{aa} ^{ab} ^{ac} ^{ad} ^{ae} ^{af} ^{ag} ^{ah} ^{ai} ^{aj} ^{ak} ^{al} ^{am} ^{an} ^{ao} ^{ap} ^{aq} ^{ar} ^{as} ^{at} ^{au} ^{av} ^{aw} ^{ax} ^{ay} ^{az} ^{ba} ^{bb} ^{bc} ^{bd} ^{be} ^{bf} ^{bg} ^{bh} ^{bi} ^{bj} ^{bk} ^{bl} ^{bm} ^{bn} ^{bo} ^{bp} ^{bq} ^{br} ^{bs} ^{bt} ^{bu} ^{bv} ^{bw} ^{bx} ^{by} ^{bz} ^{ca} ^{cb} ^{cc} ^{cd} ^{ce} ^{cf} ^{cg} ^{ch} ^{ci} ^{cj} ^{ck} ^{cl} ^{cm} ^{cn} ^{co} ^{cp} ^{cq} ^{cr} ^{cs} ^{ct} ^{cu} ^{cv} ^{cw} ^{cx} ^{cy} ^{cz} ^{da} ^{db} ^{dc} ^{dd} ^{de} ^{df} ^{dg} ^{dh} ^{di} ^{dj} ^{dk} ^{dl} ^{dm} ^{dn} ^{do} ^{dp} ^{dq} ^{dr} ^{ds} ^{dt} ^{du} ^{dv} ^{dw} ^{dx} ^{dy} ^{dz} ^{ea} ^{eb} ^{ec} ^{ed} ^{ee} ^{ef} ^{eg} ^{eh} ^{ei} ^{ej} ^{ek} ^{el} ^{em} ^{en} ^{eo} ^{ep} ^{eq} ^{er} ^{es} ^{et} ^{eu} ^{ev} ^{ew} ^{ex} ^{ey} ^{ez} ^{fa} ^{fb} ^{fc} ^{fd} ^{fe} ^{ff} ^{fg} ^{fh} ^{fi} ^{fj} ^{fk} ^{fl} ^{fm} ^{fn} ^{fo} ^{fp} ^{fq} ^{fr} ^{fs} ^{ft} ^{fu} ^{fv} ^{fw} ^{fx} ^{fy} ^{fz} ^{ga} ^{gb} ^{gc} ^{gd} ^{ge} ^{gf} ^{gg} ^{gh} ^{gi} ^{gj} ^{gk} ^{gl} ^{gm} ^{gn} ^{go} ^{gp} ^{gq} ^{gr} ^{gs} ^{gt} ^{gu} ^{gv} ^{gw} ^{gx} ^{gy} ^{gz} ^{ha} ^{hb} ^{hc} ^{hd} ^{he} ^{hf} ^{hg} ^{hh} ^{hi} ^{hj} ^{hk} ^{hl} ^{hm} ^{hn} ^{ho} ^{hp} ^{hq} ^{hr} ^{hs} ^{ht} ^{hu} ^{hv} ^{hw} ^{hx} ^{hy} ^{hz} ^{ia} ^{ib} ^{ic} ^{id} ^{ie} ^{if} ^{ig} ^{ih} ⁱⁱ ^{ij} ^{ik} ^{il} ^{im} ⁱⁿ ^{io} ^{ip} ^{iq} ^{ir} ^{is} ^{it} ^{iu} ^{iv} ^{iw} ^{ix} ^{iy} ^{iz} ^{ja} ^{jb} ^{jc} ^{jd} ^{je} ^{jf} ^{jj} ^{jk} ^{jl} ^{jm} ^{jn} ^{jo} ^{jp} ^{jq} ^{jr} ^{js} ^{jt} ^{ju} ^{jv} ^{jw} ^{jx} ^{ky} ^{kz} ^{la} ^{lb} ^{lc} ^{ld} ^{le} ^{lf} ^{lg} ^{lh} ^{li} ^{lj} ^{lk} ^{ll} ^{lm} ^{ln} ^{lo} ^{lp} ^{lq} ^{lr} ^{ls} ^{lt} ^{lu} ^{lv} ^{lw} ^{lx} ^{ly} ^{lz} ^{ma} ^{mb} ^{mc} ^{md} ^{me} ^{mf} ^{mg} ^{mh} ^{mi} ^{mj} ^{mk} ^{ml} ^{mn} ^{mo} ^{mp} ^{mq} ^{mr} ^{ms} ^{mt} ^{mu} ^{mv} ^{mw} ^{mx} ^{my} ^{mz} ^{na} ^{nb} ^{nc} nd ^{ne} ^{nf} ^{ng} ^{nh} ⁿⁱ ^{nj} ^{nk} ^{nl} ^{nm} ⁿⁿ ^{no} ^{np} ^{nq} ^{nr} ^{ns} ^{nt} ^{nu} ^{nv} ^{nw} ^{nx} ^{ny} ^{nz} ^{oa} ^{ob} ^{oc} ^{od} ^{oe} ^{of} ^{og} ^{oh} ^{oi} ^{oj} ^{ok} ^{ol} ^{om} ^{on} ^{oo} ^{op} ^{oq} ^{or} ^{os} ^{ot} ^{ou} ^{ov} ^{ow} ^{ox} ^{oy} ^{oz} ^{pa} ^{pb} ^{pc} ^{pd} ^{pe} ^{pf} ^{pg} ^{ph} ^{pi} ^{pj} ^{pk} ^{pl} ^{pm} ^{pn} ^{po} ^{pp} ^{pq} ^{pr} ^{ps} ^{pt} ^{pu} ^{pv} ^{pw} ^{px} ^{py} ^{pz} ^{qa} ^{qb} ^{qc} ^{qd} ^{qe} ^{qf} ^{qg} ^{qh} ^{qi} ^{qj} ^{qk} ^{ql} ^{qm} ^{qn} ^{qo} ^{qp} ^{qq} ^{qr} ^{qs} ^{qt} ^{qu} ^{qv} ^{qw} ^{qx} ^{qy} ^{qz} ^{ra} ^{rb} ^{rc} rd ^{re} ^{rf} ^{rg} ^{rh} ^{ri} ^{rj} ^{rk} ^{rl} ^{rm} ^{rn} ^{ro} ^{rp} ^{rq} ^{rr} ^{rs} ^{rt} ^{ru} ^{rv} ^{rw} ^{rx} ^{ry} ^{rz} ^{sa} ^{sb} ^{sc} ^{sd} ^{se} ^{sf} ^{sg} ^{sh} ^{si} ^{sj} ^{sk} ^{sl} sm ^{sn} ^{so} ^{sp} ^{sq} ^{sr} ^{ss} st ^{su} ^{sv} ^{sw} ^{sx} ^{sy} ^{sz} ^{ta} ^{tb} ^{tc} ^{td} ^{te} ^{tf} ^{tg} th ^{ti} ^{tj} ^{tk} ^{tl} tm ^{tn} ^{to} ^{tp} ^{tq} ^{tr} ^{ts} ^{tt} ^{tu} ^{tv} ^{tw} ^{tx} ^{ty} ^{tz} ^{ua} ^{ub} ^{uc} ^{ud} ^{ue} ^{uf} ^{ug} ^{uh} ^{ui} ^{uj} ^{uk} ^{ul} ^{um} ^{un} ^{uo} ^{up} ^{uq} ^{ur} ^{us} ^{ut} ^{uu} ^{uv} ^{uw} ^{ux} ^{uy} ^{uz} ^{va} ^{vb} ^{vc} ^{vd} ^{ve} ^{vf} ^{vg} ^{vh} ^{vi} ^{vj} ^{vk} ^{vl} ^{vm} ^{vn} ^{vo} ^{vp} ^{vq} ^{vr} ^{vs} ^{vt} ^{vu} ^{vv} ^{vw} ^{vx} ^{vy} ^{vz} ^{wa} ^{wb} ^{wc} ^{wd} ^{we} ^{wf} ^{wg} ^{wh} ^{wi} ^{wj} ^{wk} ^{wl} ^{wm} ^{wn} ^{wo} ^{wp}

100

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of discharge and P.S.T.	Discharge rate in cfs	Temp. in °F	Dissolved oxygen ppm	Specific Conductance at 25°C μ mhos/cm	pH	Mineral constituents in parts per million												Total dissolved solids in ppm	Hardness as CaCO ₃ Total in ppm	Total acidity in ppm	Temp. in °F	Analyzed by	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)						Other constituents

NACIMIENTO RIVER NEAR SAN MIGUEL (STA. 438)																					
10-2-63 1515	400 est.	68	12.1	134	8.3 8.2	2.28 0.31	7.2	0.13	0	11.3	1.85	5.4 0.15	0.1	0.1	0.1	12	114	16	4	23 23	USGS
11-6-63 0920	Bradley 169	54	9.5	90	6.8 8.0	8.3 2.45c	8.2	0.36	0	12.8	5.5	0.16	0.1	0.1	0.1	13	122	17	1	6.2 2.3	
12-3-63 1645	Bradley 193	57	12.1	118	244	8.1 2.74c	8.1	0.35	0	12.6	4.0	0.11	0.1	0.1	0.1	13	121	18	2	6.2	
1-8-64 1800	500 est.	54	11.2	106	261	8.5 2.74c	8.5	0.37	0.17	11.8	4.5	0.17	0.1	0.1	0.1	13	121	19	5	2.3 .5	
2-4-64 1000	600 est.	57	11.9	117	220	8.0 1.96c	7.3	0.32	0	100	1.64	5.0	0.0	0.0	0.0	14	98	16	6	2.3 62	
3-3-64 1010	2.4	53	9.3	87	335	7.6 3.70c	11	0.48	0.17	15.6	11	0.31	0.1	0.1	0.1	13	160	24	20	6.2 2.3	
4-8-64 1030	163	70	11.4	129	241	8.3 2.17c	8.1	0.35	0.13	17.0	4.5	0.17	0.1	0.1	0.1	14	106	14	1	2.3 0.62	
5-5-64 0735	281	49	10.9	96	242	7.9 1.70	7.8	0.34	0	114	1.87	5.5 0.16	1.2 0.02	0.2 0.01	0.1	152	13	110	17	4 0.62	
6-11-64 1030	410	56	12.2	118	232	8.0 2.74c	8.4	0.37	1	117	1.92	3.5 0.10	0.1	0.1	0.1	13	123	25	1	6.2 6.2	
7-9-64 1340	470	70	10.2	116	237	8.4 2.38c	8.2	0.36	0.07	11.93	4.5	0.13	0.1	0.1	0.1	13	119	19	2	2.3 2.3	
8-5-64 0615	558	55	9.6	92	369	7.3 7.8	8.4	0.37	0	127	2.08	5.0 0.16	0.1	0.1	0.1	13	124	20	1	2.3 5	
9-2-64 0750	514	59	8.2	82	279	7.3 7.7	31	0.37	0	136	24	5.2 0.15	0.9 0.01	0.1	10	165	13	126	16	1 2.3	

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in ppm

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{VI}), reported here as 0.0 except as shown.

e. Derived from conductivity vs. TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i. Mineral only analyses (USGS): United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

3255-04-01 (M-1) (20)

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge Temp in °C	Dissolved oxygen in % ppm	Specific conductance (microhm/cm at 25°C)	pH	Mineral constituents in parts per million										Total dis- solved solids in ppm	Per- cent solid in ppm	Hardness as CaCO ₃ Total N.C. ppm	Turbid- ity in ppm	Coliform MPN/ml	Analyzed by
					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potash (K)	Carbon- (CO ₃)	Bicarb- (HCO ₃)	Sul- (SO ₄)	Chlo- (Cl)	Ni- trate (NO ₃)	Fluor- ide (F)						
10-2-63 1300	DRY																			USCS
11-6-63 0830	DRY																			
12-3-63	DRY																			
1-8-64 1630	4.0	56	10.8	105	8.2 8.4	7.08c 3.37	82	0.27	286 4.09			86 2.37			0.2	354	106	1.0	620. 230.	
2-6-64	10	64	8.2	87	8.0 8.7	7.64c 2.18	50	0	308 5.05			54 1.32			0.0	382	129	2	230. 230.	
3-3-64 0910	6.0	48	11.2	98	8.2 8.5	7.60c 3.39	78	6	330 5.41			66 1.81			0.4	380	100	20	6.2 2.3	
4-8-64 1810	8.9	70	6.2	70	8.4 8.7	7.68c 2.70	62	0	296 4.85			65 1.83			0.2	384	141	2	1300. 620.	
5-5-64 0645	DRY																			
6-11-64 1130	DRY																			
7-9-64	DRY																			
8-5-64	DRY																			
9-2-64 0730	DRY																			

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBOPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

3-25-64 0-43 240 590

TABLE D-2 ANALYSES OF SURFACE WATER

SOUTH BAY AREA

Date and time of day, PST	Water Elevation (feet)	Temp in °F	Dissolved oxygen ppm	Specific conductance (micromhos/cm at 25°C)	Mineral constituents in parts per million												Total dissolved solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Surf. water coliform MPN/ml	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)				
BETHANY FOREBAY AT SOUTH BAY FISHING PLANT (STA. 207)																				
10-28-63 1225				506	25 1.25	13 1.05	50 2.18	2.9 0.07	0	106 1.76	38 1.79	76 2.09	2.6 0.04	0.1 0.00	0.19	18			DWA	
12-2-63 1530	237.5			522	24 1.20	16 1.12	54 2.35	2.6 0.07	0	97 1.59	94 2.14	76 2.14	2.1 0.03	0.2 0.01	0.30	16				
1-6-64 1410	229.9			551	26 1.30	13 1.04	60 2.61	2.1 0.05	0	90 1.48	56 1.16	81 2.28	2.5 0.02	0.2 0.01	0.38	14				
2-3-64 1345				588	26 1.30	16 1.28	63 2.74	2.1 0.05	0	93 1.52	52 2.29	86 2.48	2.6 0.04	0.2 0.01	0.40	13				
3-2-64 1330	231.0			615	38 1.90	21 1.72	87 3.78	3.5 0.09	0	106 1.76	102 2.12	128 3.61	4.0 0.06	0.40	0.40					
4-1-64 1330	236.7			616	33 1.65	16 1.24	62 2.70	3.0 0.08	0	98 1.61	90 2.13	90 2.45	3.1 0.05	0.20	0.20					
5-1-64 1430				585	30 1.50	17 1.38	59 2.57	2.2 0.07	0	113 1.85	60 1.75	80 2.26	3.1 0.05	0.30	0.30					
6-1-64 1045	233.9			406	25 1.25	11 0.84	35 1.72	2.5 0.06	0	88 1.44	34 1.71	55 1.55	0.7 0.01	0.20	0.20					
7-1-64 1020	232.6			322	17 0.85	11 0.84	30 1.30	2.1 0.05	0	87 1.42	38 1.79	35 0.99	1.7 0.03	0.10	0.10					
8-1-64 0845	230.3			382	16 0.80	12 1.00	38 1.65	2.3 0.06	0	83 1.36	22 0.46	58 1.64	0.6 0.01	0.20	0.20					
9-1-64 0930	230.6			566	18 0.90	15 1.26	66 2.78	3.1 0.08	0	88 1.44	33 0.69	109 3.07	0.6 0.01	0.10	0.10					

a. Field pH

b. Laboratory pH

c. Sum of calcium and magnesium in ppm

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e. Derived from conductivity vs TDS curves

f. Determined by addition of analyzed constituents

g. Gravimetric determination

h. Annual median and range

i. Mineral analysis by USGS

j. Mineral analysis by SBCECD

k. Mineral analysis by SBCECD

l. Mineral analysis by SBCECD

m. Mineral analysis by SBCECD

n. Mineral analysis by SBCECD

o. Mineral analysis by SBCECD

p. Mineral analysis by SBCECD

q. Mineral analysis by SBCECD

r. Mineral analysis by SBCECD

s. Mineral analysis by SBCECD

t. Mineral analysis by SBCECD

u. Mineral analysis by SBCECD

v. Mineral analysis by SBCECD

Mineral analysis by USGS, California Department of Public Health, Division of Public Health, or United States Public Health Service (USPHS). San Bernardino County Flood

Public Health (LBOPH), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of

Public Health (LBOPH), Terminal Testing Laboratories, Inc. (ITL), or California Department of Water Resources (DWR), as indicated

TABLE D-2
ANALYSES OF SURFACE WATER

SOUTH BAY AQUEDUCT

Date collected unloaded P.S.T.	Water Elevation in ft. (feet)	Specific location of collection	Specific conductance at 25°C pH	Mineral constituents in parts per million											Total dissolved solids in ppm	Per cent solid - in ppm	Hardness as CaCO ₃ Total N.C. ppm	Turbidity MPN/ml	Analyzed by	
				Calcium (Ca)	Magne- (Mg)	Sodium (Na)	Potash (K)	Carbon- (CO ₃)	Bicarb- (HCO ₃)	Sul- (SO ₄)	Chlo- (Cl)	Ni- (NO ₃)	Fluo- (F)	Boron (B)						Silica (SiO ₂)
LIVERMORE CANAL AT PATTERSON RESERVOIR (STA. 214)																				
10-28-63 1620		Reservoir	563									41	85			325		132		DMR
12-2-63 1300		Reservoir	547		2.56c							44	79			304		128		
1-6-64 1520	708.8	Canal	515		2.10c							45	79			270		105		
2-3-64 1645		Reservoir	528		2.26c							51	79			282		113		
3-2-64 1600	707.5	Reservoir	613		2.70c							64	92		ASS=0.0	333		135		
4-1-64 1600	706.0	Reservoir	652		2.76c							67	98			360		148		
5-1-64 1250		Reservoir	618		3.02c							67	90			349		151		
6-1-64 1330	708.3	Reservoir	472		2.46c							44	64			259		123		
7-1-64 1030	709.0	Canal	330		1.78c							26	37			186		89		
8-1-64 1415	708.2	Canal	376		1.76c							24	54			214		88		
9-1-64 1445	707.9	Canal	576		2.18c							31	106			302		109		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service (USPHS).
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS). San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DMR), as indicated.

TABLE D-3

SUMMARY OF COLIFORM ANALYSES

Station	Station Number	Coliform MPN/ml		
		Maximum	Median	Minimum
<u>North Coastal Region (No. 1)</u>				
Gualala River, South Fork, near Annapolis	9a	2,400	3.0	0.2
Navarro River near Navarro	8b	1,300	6.2	0.50
Soyo River near Fort Bragg	10c	2,400	13	0.62
Russian River, East Fork, at Potter Valley Powerhouse	10a	50	2.3	0.62
Russian River at Guerneville	10	2,400	13	0.62
Russian River near Healdsburg	9	230	23	0.62
Russian River near Hopland	8a	620	23	2.3
<u>San Francisco Bay Region (No. 2)</u>				
Alameda Creek near Niles	73	620	23	2.3
Coyote Creek near Madrone	82	620	23	0.62
Los Gatos Creek near Los Gatos	74	230	6.2	0.23
Napa River near St. Helena	72	7,000	62	1.3
<u>Central Coastal Region (No. 3)</u>				
Carmel River at Robles del Rio	83	230	5.6	0.23
Nacimiento River near San Miguel	43b	62	2.3	0.23
Pajaro River near Chittenden	77	230	6.2	2.3
Salinas River near Bradley	43c	62	6.2	0.23
Salinas River at Paso Robles	43a	1,300	230	2.3
Salinas River near Spreckels	43	7,000	62	21
San Antonio River near Pleyto	43d	230	9.6	2.3
San Benito River near Bear Valley Fire Station	77a	230	6.2	0.62
San Lorenzo River at Big Trees near Felton	75	130	6.2	1.3
Soquel Creek at Soquel	76	62	22	2.3
Uvas Creek near Morgan Hill	96	230	5.4	0.13

TABLE D-4
SPECTROGRAPHIC ANALYSES OF SURFACE WATER

Sta.	Loc.	Date	Constituents, in parts per billion													2"	
			Alum. num. (d.i.)	Baryl. num. (d.i.)	Asym. num. (d.i.)	Comum. num. (d.i.)	Cuba. num. (d.i.)	Pro- mum. (d.i.)	Urea. num. (d.i.)	Li. num. (d.i.)	Amo. num. (d.i.)	Magn. num. (d.i.)	Niob. num. (d.i.)	Lead. num. (d.i.)	2"		
NORTH COASTAL REGION (No. 1)																	
10	RUSSIAN RIVER AT GUERREVILLE	5-14-64	≤1.4	<0.50	<0.25	<1.2	<1.2	<1.2	1.2	<5.0	<0.25	<1.2	≤0.25	1.2	<1.2	<0.50	<5.0
10	RUSSIAN RIVER AT GUERREVILLE	9-4-64	3.7	<0.57	<0.29	<1.4	<1.4	<1.4	5.4	<5.7	<0.29	<1.4	≤0.29	0.83	<1.4	<0.57	<5.7
SAN FRANCISCO BAY REGION (No. 2)																	
73	ALAMEDA CREEK NEAR NILES	5-5-64	≤1.4	<0.57	<0.29	<1.4	<1.4	<1.4	2.2	<5.7	<0.29	<1.4	1.4	1.5	<1.4	<0.57	<5.7
73	ALAMEDA CREEK NEAR NILES	9-2-64	7.7	<0.57	<0.29	<1.4	<1.4	<1.4	6.6	<5.7	<0.29	<1.4	1.7	1.1	<1.4	<0.57	<5.7
71	ARROYO DEL VALLE NEAR LIVERMORE	5-4-64	≤1.4	<0.57	<0.29	<1.4	<1.4	<1.4	1.9	<5.7	<0.29	<1.4	0.69	0.54	<1.4	<0.57	<5.7
82	COVOTE CREEK NEAR MADRONE	5-7-64	≤1.4	<0.57	<0.29	<1.4	<1.4	<1.4	2.1	<5.7	<0.29	<1.4	≤0.29	1.9	<1.4	<0.57	<5.7
82	COVOTE CREEK NEAR MADRONE	9-4-64	11	<0.57	<0.29	<1.4	<1.4	<1.4	2.8	<5.7	<0.29	<1.4	1.1	2.0	<1.4	<0.57	<5.7
72	NAPA RIVER NEAR ST. HELENA	5-12-64	≤1.2	<0.50	<0.25	<1.2	<1.2	<1.2	1.6	<5.0	<0.25	<1.2	≤0.25	1.6	<1.2	<0.50	<5.0
72	NAPA RIVER NEAR ST. HELENA	9-2-64	3.4	<0.57	<0.29	<1.4	<1.4	<1.4	3.4	<5.7	<0.29	<1.4	≤0.29	1.1	<1.4	<0.57	<5.7
CENTRAL COASTAL REGION (No. 3)																	
77	PAJARO RIVER AT CHITTENDEN	5-7-64	6.6	<0.57	<0.29	<1.4	<1.4	<1.4	2.1	<5.7	<0.29	<1.4	1.9	7.1	<1.4	<0.57	<5.7
77	PAJARO RIVER AT CHITTENDEN	9-4-64	8.3	<0.57	<0.29	<1.4	<1.4	<1.4	4.6	<5.7	<0.29	<1.4	4.3	7.4	<1.4	<0.57	<5.7
43	SALINAS RIVER NEAR SPECKELS	5-7-64	≤1.4	<0.57	<0.29	<1.4	<1.4	<1.4	6.0	<5.7	<0.29	13	9.7	5.1	<1.4	<0.57	<5.7
43	SALINAS RIVER NEAR SPECKELS	9-4-64	4.6	<0.57	<0.29	<1.4	<1.4	<1.4	21	<5.7	<0.29	12	19	3.7	<1.4	<0.57	<5.7

RADIOASSAYS OF SURFACE WATER

STATION	STA. NO.	DATE	PICO CURIES PER LITER			
			DISS. ALPHA	SOLID ALPHA	DISS. BETA	SOLID BETA
<u>REGION (NO. 1)</u>						
BIG RIVER NEAR MOUTH	8c	5-15-64	-0.53 ± 0.26	0.68 ± 0.89	1.60 ± 11.15	0.88 ± 8.37
BIG RIVER NEAR MOUTH	8c	9-3-64	-0.70 ± 0.32	0.17 ± 0.91	9.53 ± 11.28	2.91 ± 7.91
GUALALA RIVER, SOUTH FORK NEAR ANNAPOLIS	9a	5-14-64	1.02 ± 1.39	-0.25 ± 0.34	1.48 ± 11.34	-1.97 ± 8.10
GUALALA RIVER, SOUTH FORK NEAR ANNAPOLIS	9a	9-4-64	0.32 ± 1.12	-0.29 ± 0.61	-9.00 ± 11.10	-4.27 ± 7.61
NAVARRO RIVER NEAR NAVARRO	8b	5-14-64	-0.13 ± 0.96	-0.33 ± 0.42	4.68 ± 11.41	-1.08 ± 0.62
NAVARRO RIVER NEAR NAVARRO	8b	9-4-64	-0.96 ± 0.39	-0.12 ± 0.72	-3.00 ± 11.09	6.70 ± 7.97
NOYO RIVER NEAR FORT BRAGG	10c	5-14-64	-0.32 ± 0.26	-0.33 ± 0.42	6.71 ± 9.66	3.87 ± 8.74
NOYO RIVER NEAR FORT BRAGG	10c	9-4-64	0.05 ± 0.97	0.14 ± 0.91	-1.42 ± 10.79	2.90 ± 7.82
RUSSIAN RIVER, EAST FORK AT POTTER VALLEY POWERHOUSE	10a	5-12-64	-0.38 ± 0.74	-0.03 ± 0.59	-2.61 ± 11.12	-1.60 ± 8.71
RUSSIAN RIVER, EAST FORK AT POTTER VALLEY POWERHOUSE	10a	9-2-64	0.70 ± 1.37	-0.43 ± 0.46	-8.06 ± 9.47	-6.56 ± 8.45
RUSSIAN RIVER AT GUERNEVILLE	10	5-14-64	-0.50 ± 0.64	-0.33 ± 0.42	-3.19 ± 11.33	4.66 ± 8.89
RUSSIAN RIVER AT GUERNEVILLE	10	9-4-64	-0.32 ± 1.05	-0.12 ± 0.93	0.78 ± 11.31	-3.96 ± 9.00
RUSSIAN RIVER NEAR HEALDSBURG	9	5-12-64	-1.07 ± 0.45	0.27 ± 0.84	0.75 ± 10.51	-7.65 ± 8.58

TABLE D-5

RADIOASSAYS OF SURFACE WATER

STATION	STA. NO.	DATE	PICO CURIES PER LITER			
			DISS. ALPHA	SOLID ALPHA	DISS. BETA	SOLID BETA
<u>REGION (NO. 1)</u>						
RUSSIAN RIVER NEAR HEALDSBURG	9	9-2-64	-1.23 \pm 0.45	-0.81 \pm 0.29	-2.12 \pm 10.10	-3.80 \pm 7.60
RUSSIAN RIVER NEAR HOPLAND	8a	5-12-64	-0.33 \pm 0.26	1.34 \pm 1.10	4.10 \pm 9.00	-1.54 \pm 9.25
RUSSIAN RIVER NEAR HOPLAND	8a	9-2-64	-0.76 \pm 0.76	-0.43 \pm 0.46	-1.60 \pm 10.10	1.17 \pm 8.71
<u>REGION (NO. 2)</u>						
ALAMEDA CREEK NEAR NILES	73	5-5-64	0.50 \pm 1.01	1.19 \pm 1.20	14.67 \pm 10.98	-3.13 \pm 10.17
ALAMEDA CREEK NEAR NILES	73	9-2-64	-1.77 \pm 1.38	-0.57 \pm 0.48	4.96 \pm 13.14	-9.30 \pm 7.84
ARROYO DEL VALLE NEAR LIVERMORE	71	5-4-64	0.19 \pm 1.41	-0.08 \pm 0.61	-11.89 \pm 9.63	-4.60 \pm 9.61
COYOTE CREEK NEAR MADRONE	82	5-7-64	-0.18 \pm 0.80	0.62 \pm 1.00	-3.64 \pm 9.39	3.49 \pm 9.81
COYOTE CREEK NEAR MADRONE	82	9-4-64	-0.81 \pm 1.87	-0.25 \pm 0.44	-9.56 \pm 12.17	-2.88 \pm 8.63
LOS GATOS CREEK NEAR LOS GATOS	74	5-6-64	-0.85 \pm 1.17	0.23 \pm 0.65	-1.56 \pm 13.62	4.61 \pm 8.99
LOS GATOS CREEK NEAR LOS GATOS	74	9-3-64	0.40 \pm 3.14	0.21 \pm 0.81	-1.01 \pm 13.14	-5.38 \pm 9.05
NAPA RIVER NEAR ST. HELENA	72	5-12-64	-0.50 \pm 0.27	0.23 \pm 0.65	-0.01 \pm 12.11	9.72 \pm 9.48
NAPA RIVER NEAR ST. HELENA	72	9-2-64	-0.40 \pm 0.88	0.20 \pm 0.70	5.89 \pm 12.46	9.42 \pm 8.80

RADIOASSAYS OF SURFACE WATER

STATION	STA. NO.	DATE	PICO CURIES PER LITER			
			DISS. ALPHA	SOLID ALPHA	DISS. BETA	SOLID BETA
REGION (NO. 3)						
CARMEL RIVER AT ROBLES DEL RIO	83	5-7-64	-0.28 \pm 0.55	-0.15 \pm 0.56	1.44 \pm 11.36	-1.68 \pm 8.66
NACIMIENTO RIVER NEAR SAN MIGUEL	43b	5-5-64	0.06 \pm 1.07	0.22 \pm 0.75	-4.31 \pm 11.53	-7.08 \pm 8.45
NACIMIENTO RIVER NEAR SAN MIGUEL	43b	9-2-64	0.23 \pm 1.13	-0.35 \pm 0.45	10.27 \pm 11.64	-0.77 \pm 9.21
PAJARO RIVER NEAR CHITTENDEN	77	5-7-64	2.01 \pm 4.66	-0.06 \pm 0.50	12.37 \pm 14.86	3.67 \pm 8.38
PAJARO RIVER NEAR CHITTENDEN	77	9-4-64	-5.12 \pm 4.31	-0.07 \pm 0.72	-1.15 \pm 13.67	-5.83 \pm 8.58
SALINAS RIVER NEAR BRADLEY	43c	5-5-64	-0.12 \pm 0.97	0.22 \pm 0.76	9.35 \pm 11.66	1.73 \pm 8.84
SALINAS RIVER NEAR BRADLEY	43c	9-2-64	-0.40 \pm 1.06	0.24 \pm 0.81	-1.85 \pm 10.45	-3.88 \pm 8.69
SALINAS RIVER NEAR SPRECKELS	43	5-7-64	-0.35 \pm 5.49	-0.21 \pm 0.68	-0.84 \pm 16.03	6.74 \pm 9.01
SALINAS RIVER NEAR SPRECKELS	43	9-4-64	-0.91	0.74 \pm 0.97	28.00 \pm 14.41	-0.44 \pm 2.55
SAN ANTONIO RIVER NEAR PLEYTO	43d	5-5-64	-0.16 \pm 1.09	-0.15 \pm 0.55	1.80 \pm 11.03	-1.81 \pm 8.57
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION	77a	5-5-64	1.65 \pm 5.62	-0.15 \pm 0.56	14.74 \pm 16.16	7.51 \pm 9.02
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION	77a	9-2-64	-4.61 \pm 8.24	-0.05 \pm 0.59	-26.01 \pm 33.22	-3.17 \pm 8.62
SAN LORENZO RIVER AT BIG TREES NEAR FELTON	75	5-6-64	0.41 \pm 1.14	-0.52 \pm 0.22	6.57 \pm 12.64	0.97 \pm 8.74

TABLE D-5
RADIOASSAYS OF SURFACE WATER

STATION	STA. NO.	DATE	PICO CURIES PER LITER			
			DISS. ALPHA	SOLID ALPHA	DISS. BETA	SOLID BETA
REGION (NO. 3)						
SAN LORENZO RIVER AT BIG TREES NEAR FELTON	75	9-3-64	0.15 ± 1.02	0.33 ± 0.84	-3.18 ± 10.27	-1.80 ± 8.43
SOQUEL CREEK AT SOQUEL	76	5-6-64	-0.16 ± 1.80	-0.34 ± 0.46	0.48 ± 13.58	-4.14 ± 8.52
SOQUEL CREEK AT SOQUEL	76	9-3-64	2.60 ± 3.94	-0.46 ± 0.46	-9.98 ± 12.87	-10.05 ± 8.38
UVAS CREEK NEAR MORGAN HILL	96	5-7-64	0.51 ± 1.12	0.21 ± 0.75	1.37 ± 10.39	10.05 ± 10.64
UVAS CREEK NEAR MORGAN HILL	96	9-4-64	-0.41 ± 1.33	-0.57 ± 0.48	-9.91 ± 11.75	-4.77 ± 7.77

TABLE D-6

DESCRIPTION OF SALINITY OBSERVATION STATION
1963-64 Water Year

STATION	Miles from Golden Gate (a)	Time Interval (b)		LOCATION
		Hours	Min	
Crockett - Sea Pablo Bay	27.7	3	30	West end of Carquinez Strait, south shore, 0.2 mile east of Carquinez Bridge on wharf of C and H Sugar Refinery Corporation.
Martinez - Carquinez Strait	33.1	3	50	Sampled from Shell Oil Company dock, about 0.6 mile downstream from Southern Pacific Company railroad bridge.
Port Chicago - Suisun Bay	41.0	4	20	South shore of Suisun Bay at U. S. Naval ammunition loading wharf below Port Chicago.
Middle Point - Suisun Bay	41.5	4	30	South shore of Suisun Bay at Allied Chemical Plant intake, about 0.5 mile upstream from Middle Point.
Pittsburg - Suisun Bay	48.0	5	00	East end of Suisun Bay, south shore, at Pittsburg Yacht Harbor.
Spoonbill Creek - Suisun Bay	48.9	5	05	At Sacramento Northern Railroad crossing.
Collinsville - Sacramento River	50.8	5	25	Sacramento River, north bank at junction with San Joaquin River.

MAXIMUM OBSERVED SALINITY AT BAY AND DELTA STATIONS

In parts of chloride per million parts of water*

STATION	WATER YEAR											
	1931	1938	1939	1944 c	1952	1955	1956 d	1958	1959	1962	1963	1964
Sacramento - San Joaquin Delta System Unimpaired Runoff in Percent of Average (e)	35	191	50	63	171	64	178	169	67	93	132	63
Crockett					13200	16600	15300	11900	15000	13900	13100	14600
Martinez	16900	11600	16400		8900	11900	11900	7150	10200	12700	11500	12900
Port Chicago					6900	12500	9750	5830	15640	9370	9200	10700
Middle Point***												10100
Pittsburg					1200	7800	3440	1200	5110	3980	1350	3280
Spoonbill Creek**	13900	2560	11800	7300	2800	6400	4040	930	6270	3540	2940	2980
Collinsville	12600	860	10400	4700	783	3880	2280	550	5430	2430	1980	3730

* Ocean water contains approximately 18,200 parts per million of chloride.

** Station discontinued December 1963.

*** Station initiated January 1964.

a Mileage measured to station along main channel. For stations off the main channel, the mileage shown is the same distance along the main channel to a point whereon the time of the occurrence of the tidal phase is the same as that of the observation station.

b Time interval between high tide at Golden Gate and time for taking samples at station.

c Releases of stored water from Shasta Lake commenced in 1944.

d Releases of stored water from Folsom Reservoir commenced in 1956.

e Average taken as mean annual unimpaired flow at foothill stations of major tributaries for 50-year period October 1910 through September 1960.

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*
in parts of chloride per million parts of water

STATION	DATE							
	10-2-63	10-6-63	10-10-63	10-14-63	10-18-63	10-22-63	10-26-63	10-30-63
Crockett	11200			10400	9800	9220	8040	10400
Martinez	5880	8820	a7160	7740	7840	a6280	6860	7350
Port Chicago	4510	1960	6180	3950	2740	3380	2940	4020
Pittsburg	b4233		a235	169		a142	471	116
Spoon Bill Creek	a657	480	a569	407			220	419
Collinsville	a230	230	a76	82	a41	a25	a20	87

STATION	DATE							
	11-2-63	11-6-63	11-10-63	11-14-63	11-18-63	11-22-63	11-26-63	11-30-63
Crockett	11300		6760	10000	7450	4510	5980	7600
Martinez	10700		a4410	7840	6220	a4120	6470	6130
Port Chicago	5490	a7840	2160		1810	470	1470	1950
Pittsburg			b488		45	a31		
Spoon Bill Creek	485	2980		108				26
Collinsville	336	167	36	27	22	15		

STATION	DATE							
	12-2-63	12-6-63	12-10-63	12-14-63	12-18-63	12-22-63	12-26-63	12-30-63
Crockett	6860	5490	7450	7400	7500	6180	a7200	
Martinez	3870	4260	4070	2840	6810	4750		5930
Port Chicago		529	3240	2720		1790	4510	3530
Pittsburg			28			41		59
Spoon Bill Creek	45	31						
Collinsville	11		14	13	a12		19	37

STATION	DATE							
	1-2-64	1-6-64	1-10-64	1-14-64	1-18-64	1-22-64	1-26-64	1-30-64
Crockett							5200	4610
Martinez	4800	7650	8480	7940	6180	3430	6030	1470
Port Chicago	3280	3280	3670			2060		a4664
Middle Point	1400	2350	3240	3680	3040	1520	451	58
Pittsburg	72	56	52	b474		94	38	30
Collinsville	a21	34	23	113	30	28	14	15

* Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

d Taken over one hour off scheduled time.

b Taken on following day.

e Taken on preceding day.

c Taken two days later.

f Taken two days earlier.

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*
in parts of chloride per million parts of water

STATION	DATE							
	2-2-64	2-6-64	2-10-64	2-14-64	2-18-64	2-22-64	2-26-64	2-30-64
Crockett	3870	6320	7400	7200	6080	8040		
Martinez		4460	d2110	6620	4850			
Port Chicago	52	868	3580	2010	882	bd3190	2200	
Middle Point	34	515	2940	1720	a181	3580	2550	
Pittsburg	44	41		45	45		bd68	
Collinsville	16	24	19	20	18	29	19	
STATION	DATE							
	3-2-64	3-6-64	3-10-64	3-14-64	3-18-64	3-22-64	3-26-64	3-30-64
Crockett	8630	7650	9610	9800	10800	10000	9220	10100
Martinez	5100	6370	7450	7740	8140	ae7260	6370	a6270
Port Chicago	2110	2400	4460	3630	5240	6180	2740	3920
Middle Point	1620	1370	3870	2790	4900			1720
Pittsburg	a77		bd111		a174	bd343	bd216	abd189
Collinsville	42	24	75		372	274	176	198
STATION	DATE							
	4-2-64	4-6-64	4-10-64	4-14-64	4-18-64	4-22-64	4-26-64	4-30-64
Crockett	9410	7840	10800	8430	10300	10700	11400	11600
Martinez	7650	5780	8240	6860	10200	9020	9410	9410
Port Chicago	3820	2300	a3770	6080	7200	bd6270	6570	6760
Middle Point	2990	1720	3480	5640		4800	5340	d5830
Pittsburg	abd74	152	a122	a255	618	a622		a672
Collinsville	179	34	a39	a113	613	a672	a706	1410
STATION	DATE							
	5-2-64	5-6-64	5-10-64	5-14-64	5-18-64	5-22-64	5-26-64	5-30-64
Crockett	10900	a10400	11800	12600	11000	11600	10700	
Martinez	9100	9300	9610	9900	a8430	9020	10200	a7840
Port Chicago			6370	ed7990	abd4560	5540	6760	5200
Middle Point		5050	5740	6670		a2110	5440	3920
Pittsburg	1040	a720	a670	a529	a564	a333	a397	
Collinsville	1120	a539	a539	1540	a470	a211	a326	

* Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

b Taken on following day.

c Taken two days later.

d Taken over one hour off scheduled time.

e Taken on preceding day.

f Taken two days earlier.

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*

In parts of chloride per million parts of water

STATION	DATE							
	6-2-64	6-6-64	6-10-64	6-14-64	6-18-64	6-22-64	6-26-64	6-30-64
Crockett		12000	11800		e11600	10900	13400	11200
Martinez	8490	10400	10400		e7690	9330	a49420	10300
Port Chicago	b3240	bd7170	7790	e46370	6340	7600	9120	
Middle Point		5460	3530	5690	2400	3940		5480
Pittsburg	a356	a393	ab4853	abd774	a510	e577	d2280	
Collinsville	a333	a394	e755	1050	e404	a510	a1560	1840

STATION	DATE							
	7-2-64	7-6-64	7-10-64	7-14-64	7-18-64	7-22-64	7-26-64	7-30-64
Crockett	12300	a12000	13500	13200	e13800	14000	14600	13800
Martinez	a8670	10300	12200	a11700	a9250	9980		
Port Chicago	7400	8020	9810	8060	e9380	9980	10200	9250
Middle Point	5350	8560	8480	7040	8620	8520	9000	8170
Pittsburg	abd1400			1650	e1780		a2220	2340
Collinsville	a1160	a1500		e2750	a1850	a2360		a2890

STATION	DATE							
	8-2-64	8-6-64	8-10-64	8-14-64	8-18-64	8-22-64	8-26-64	8-30-64
Crockett	a14100	14100		e14100	e14200		13200	
Martinez		12900	9960	e10100	e10200	12200	11400	a9820
Port Chicago	a9620	a7710	10600	10000	10000	ed10700		11200
Middle Point		d7630	8900	8750	6540	9410	7670	10100
Pittsburg	a2270		3280	a2570			bd2160	a41960
Collinsville	a2250	a2570	3730	a2410		a2550		

STATION	DATE							
	9-2-64	9-6-64	9-10-64	9-14-64	9-18-64	9-22-64	9-26-64	9-30-64
Crockett	e11900	13000	10800	9840	11600	11400	12700	a9990
Martinez	e6130	10700	9260	a6180	a8780	a7640	a7380	a8600
Port Chicago	8440	9050	6130	4390	6910	5890	7360	e6120
Middle Point	6300	8100	5090	4580	d3080	4230	6290	
Pittsburg	ab41290		a830	e684	e425		a687	a412
Collinsville		a1570	1040	a334	a392	a340	a697	

* Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

b Taken on following day.

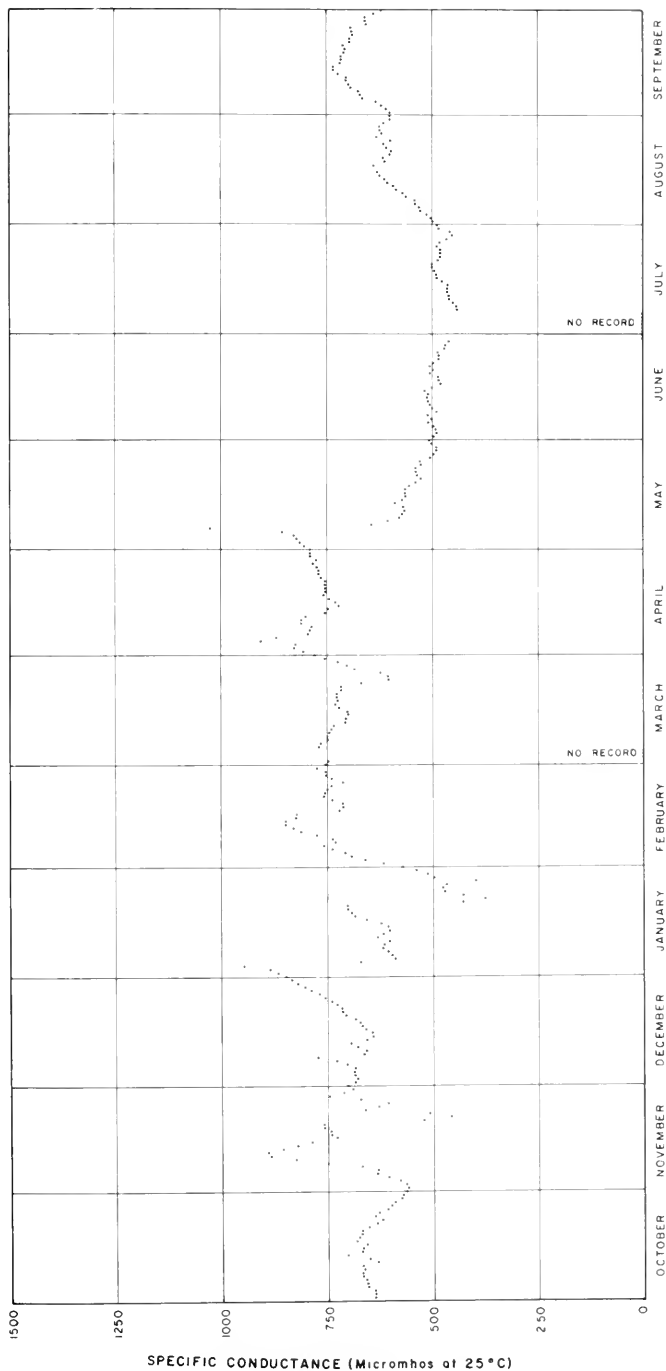
c Taken two days later.

d Taken over one hour off scheduled time.

e Taken on preceding day.

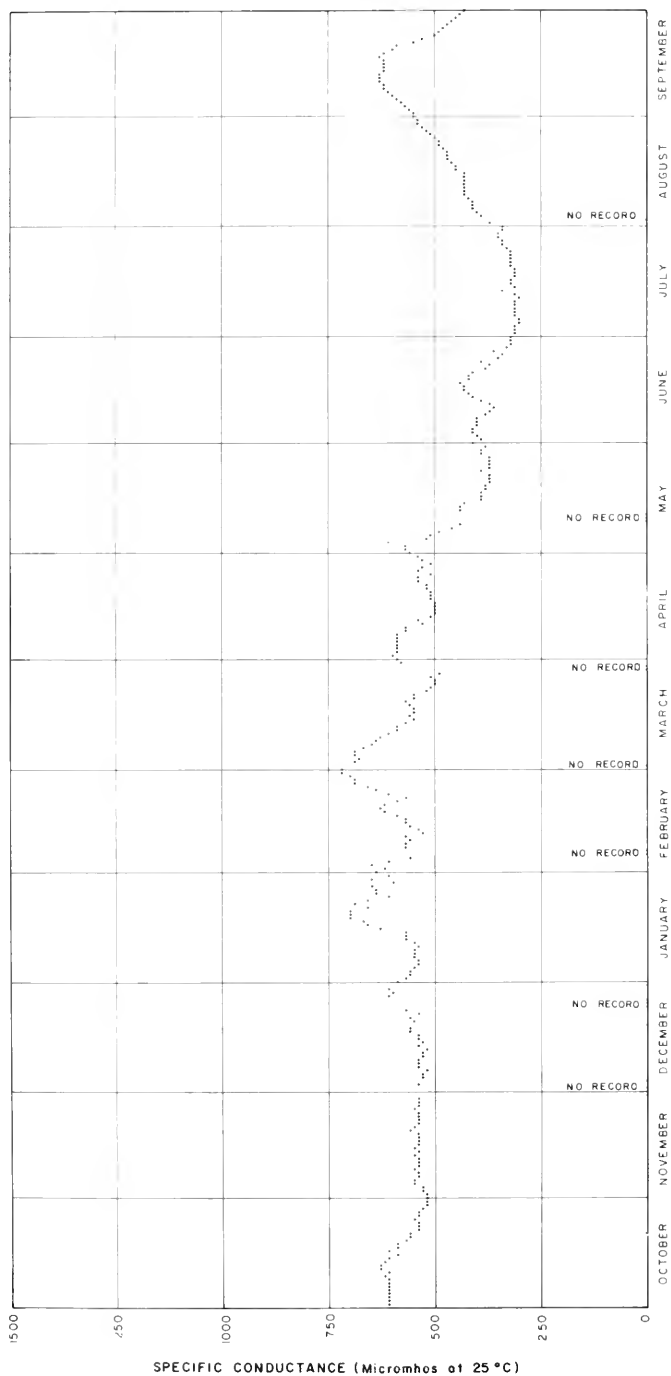
f Taken two days earlier.

FIGURE 2-1



ELECTRICAL CONDUCTANCE
DAILY MEAN
ALAMEDA CREEK NEAR NILES (STA 73)
1964

FIGURE D-2



ELECTRICAL CONDUCTANCE
DAILY READINGS AT 1300 HOURS
BETHANY FOREBAY AT
SOUTH BAY PUMPING PLANT (STA 207)
1964

APPENDIX E

GROUND WATER QUALITY



ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

State

California Department of Public Health

California Disaster Office

Local

Alameda County Flood Control and Water Conservation District

Alameda County Water District

Mendocino County

Monterey County Flood Control and Water Conservation District

Santa Clara Valley Water Conservation District

Sonoma County Flood Control and Water Conservation District

INTRODUCTION

Data presented in this appendix are measured values of selected quality characteristics of ground water samples collected in the Central Coastal Area during the period from July 1, 1963, through June 30, 1964. It consists of a table showing results of analyses of ground water and a table showing results of radioassay of ground water. Wells and ground water basins are numbered in accordance with the system described in Appendix C. The data are presented in water pollution control board region, ground water basin and well number order.

Analyses of Ground Water

Tabulated values for dissolved minerals are the analytical quantity reported in parts per million (ppm) and a computed value for equivalents per million (epm). Electrical conductivity is reported as micromhos at 25°C and water temperature is reported in degrees Fahrenheit. Values for temperature are those measured in the field at the time of sampling. Laboratory analyses of ground water were performed by the Department of Water Resources and the United States Geological Survey, all in accordance with "Standard Methods for the Examination of Water and Waste Water", 11th Edition, or with U. S. Geological Survey Water Supply Paper 1454, "Methods for Collection and Analyses of Water Samples". The methods yield comparable accuracy. Heavy metal concentrations were determined by "wet" analyses.

Table E-1 presents analyses of ground water. Definitions of abbreviations used in this table are as follows:

1. TDS---Total dissolved solids by gravimetric determination at 180°C
2. T.O.--Odor.

3. ABS---Alkyl benzene sulfonate.
4. DWR---Department of Water Resources.
5. USGS--United States Geological Survey.

Radioassay of Ground Water

Radioassay of ground water are presented in Table E-2. Determinations were made by the California Disaster Office and the Department of Public Health of suspended alpha and beta activities and dissolved alpha and beta activities in some samples and for gross activity in other samples. The samples through December 1963 were analyzed by the California Disaster Office. Samples taken after this time were analyzed by the Department of Public Health. Negative values of measured activity in some analyses reported by the Department of Public Health resulted when activity at the time of sampling was less than during the five-day background period.

Results are expressed as pico curies per liter (pc/l). The term pico curies is also written micro-micro curies and is further defined as 10^{-12} curies. The most probable error is reported along with the measured value. Results should be considered qualitative and undue emphasis should not be given to quantitative values.

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	Site well number and other number	Date sampled	Temp in °F	Specific conductance - mhos at 25° C	pH	Mineral constituents in equivalents per million											Total dissolved solids as ppm	Hardness as CaCO ₃ ppm	Analyzed by			
						Calcium (Ca)	Magne-sium (Mg)	Sodium (Na)	Potas-sium (K)	Bicar-bonate (CO ₃)	Sul-fate (SO ₄)	Oxide-ride (Cl)	Ni-tro-ride (NO ₃)	Fuo-ride (F)	Boron (B)	Silica (SiO ₂)				Other constituents		
						NORTH CASCADIA REGION (NO. 10)																
						UKIAH VALLEY (1-15)																
G. C. Gilley domestic	14N/124-SK1	9-63		565													0.8		DNR			
L. Johnson domestic	14N/124-LN1	9-63		295	7.9	21.0	17.0	8.4	1.0	0.0	11.0	15.0	8.8	24.0	0.39		0.2	156	DNR			
M. Mehtonen domestic	14N/124-26K1	9-63		353		1.05	1.37	0.36	0.02	0.00	1.80	0.31	0.25	0.39			1.6		DNR			
City of Ukiah municipal	15W/124-16E1	9-63		296	8.0	29.0	13.0	1.0	1.4	0.0	16.6	12.0	7.8	1.2	0.02		0.2	156	DNR			
Regina Water Co. municipal	15N/124-21H1	9-63		243		1.75	1.05	0.44	0.04	0.00	2.39	0.35	3.9	0.11			0.6		DNR			
D. Broggi domestic and irrigation	15N/124-35D1	9-63		426									3.9	0.11			0.6		DNR			
F. Brown domestic	16N/124-5D1	9-63		365	8.0	23.0	18.0	2.2	0.9	0.0	17.4	2.1	2.9	0.70			0.0	188	DNR			
P. G. & E. domestic and industrial	16N/124-9G1	9-63		422		1.15	1.51	0.96	0.02	0.00	2.85	0.06	6.9	0.19			0.1		DNR			
J. E. Nelson domestic	17N/124-18A1	9-63		1970									4.91	13.85			0.8		DNR			
Harry Matthews domestic	17N/124-28H1	9-63		210	7.5	19.0	7.2	9.2	0.5	0.0	2.6	1.3	7.8	8.1			0.1	128	DNR			
						0.95	0.59	0.40	0.01	0.00	1.26	0.27	0.22	0.13				77	DNR			
									SANEEL VALLEY (1-16)													
A. DeBarcanonio domestic	12N/11U-2F1	9-63		387									4.9	0.14			0.2		DNR			
E. P. Isen Irrigation	13W/11U-7D1	9-63		336	8.0	21.0	24.0	9.2	0.6	0.0	18.5	1.0	5.4	0.5			0.3	162	DNR			
A. Damiano Irrigation	13N/11U-18B1	9-63		364		1.05	2.01	0.40	0.02	0.06	3.03	0.21	8.8	9.5			1.4		DNR			
J. H. Penney Co. Irrigation	13N/11U-18B1	9-63		215									3.9	0.11			0.4		DNR			

1964

-183-

TABLE E-1

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance in μ mhos/cm at 25° C	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ ppm	Analyzed by
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Calcium-bicarbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)			
Miss G. Mallory domestic	68/86-381	9-24-63	375	8.0	31.1 1.38	19.1 1.57	19.1 0.83	1.6 0.04	1.37 0.05	1.0 0.02	4.6 1.72	1.4 0.21	0.1 0.01	0.0	0.0	35	148	DAK
Coates Public Utility District municipal	68/86-392	9-24-63	300	7.2	15.3 0.76	7.5 0.62	39.1 1.70	1.7 0.04	1.17 1.92	3.0 0.06	37 1.05	0.0 0.00	0.0 0.01	0.0	0.0	55	69	DAK
City of Sebastopol Water Department municipal	68/96-261	9-25-63	426											0.0	0.0			DAK
Dr. Willey S. Moore irrigation and domestic	78/76-19C1	9-25-63	255	7.4	16.6 0.82	7.5 0.62	25.1 1.10	0.2 0.11	1.07 2.42	0.5 0.01	3.3 0.15	0.0 0.00	0.1 0.01	0.0	0.0	50	72	DAK
Oakmont Builders irrigation	78/76-23B	9-25-63	117	7.5	6.6 0.35	2.4 0.20	1.3 0.05	4.1 0.08	0.0 0.00	1.6 0.14	7.1 0.20	2.7 0.20	0.1 0.01	0.1	0.1	40	26	DAK
Carl F. Richards irrigation	78/76-2901	9-25-63	230	7.2	9.6 0.46	17.7 0.79	17.7 0.76	1.2 0.04	1.31 2.15	1.8 0.06	1.1 0.30	0.4 0.01	0.2 0.01	0.1	0.1	48	31	DAK
J. Bordeba domestic	78/86-1C1	9-19-63	481	7.4	25.8 1.25	2.8 0.27	2.9 1.26	4.8 0.12	1.51 2.47	7.0 0.15	50 1.41	4.6 0.38	0.2 0.01	0.0	0.0	74	176	DAK
Harry Hasmusen irrigation	78/86-18Q1	9-25-63	750	7.9	35.3 1.73	29.1 2.41	10.2 0.43	2.2 0.06	0.0 0.00	1.5 0.02	4.0 1.70	0.0 0.00	0.1 0.01	0.2	0.2	64	51	DAK
C. Dettl irrigation and stock	78/86-30P1	9-20-63	766	6.8	6.3 0.33	39.1 3.23	48.2 2.09	2.7 0.07	1.62 2.66	1.7 0.05	11.6 2.93	80.1 1.29	0.2 0.01	0.3	0.3	62	269	DAK
A. Marx domestic and irrigation	78/86-13B1	9-25-63	460	8.2	13.1 1.17	13.1 1.06	47.1 1.90	1.6 0.06	0.0 0.00	0.0 0.00	17.4 0.47	0.0 0.00	0.2 0.01	0.1	0.1	42	112	DAK
C. W. Gilbert domestic	78/96-9F1	9-20-63	161	8.1	16.1 0.80	1.9 0.16	15.1 0.65	1.2 0.03	0.0 0.00	1.1 0.23	1.4 0.39	1.2 0.02	0.3 0.02	0.0	0.0	41	48	DAK
Richard Ranch, Inc. irrigation	86/96-2301	9-19-63	241	8.4	11.3 0.55	13.1 1.05	19.1 0.83	2.5 0.06	2.2 0.07	5.0 1.63	2.9 0.73	4.4 0.07	0.3 0.02	0.3	0.3	86	30	DAK
Fred Bros. Winery domestic and industrial	96/106-1C1	9-19-63	539	8.5	2.9 1.25	51.1 4.21	13.1 0.57	0.6 0.02	1.1 2.37	1.7 0.35	10 0.28	1.7 0.77	0.4 0.02	0.1	0.1	27	284	DAK

TABLE E-1

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	Mineral constituents in parts per million										Total dissolved solids in ppm	Percent sulfur in ppm	Hardness as CaCO ₃ Total N C ppm	Analyzed by		
					equivalents per million															
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Polysulfate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)
Mrs. R. Glöckle domestic and stock	MR021 2N/66-101	9-6-63		1300									162 5.70				0.2			BAR
		6-6-66		1320		220 9.37							160 3.75				0.2			DRP
O. White domestic and irrigation	R1/66-301	9-6-63		4130									1070 30.18				1.3			BAR
		6-6-66		4270		329 13.31							1120 31.60				0.2			BAR
S. S. Herzog Co., steeply hollow dairy, domestic and stock	R5/66-1101	9-6-63		1880									431 9.36				0.2			BAR
		6-6-66		1900		112 3.77							229 9.28							BAR
L. Strozzi stock	R6/66-1201	9-6-63		175									17 0.48				0.2			BAR
		6-17-66		366									26 0.73							BAR
Supprecht domestic, irrigation, and stock	R6/66-1081	9-6-63		660									52 1.27							BAR
		6-17-66		672	6.7	62 3.46	26 1.13	0.5 0.01	0 0.00	108 2.75	52 1.08	32 1.27	63 1.78			0.0		416	1.8	1.28
Earl Johnson domestic	R6/76-14F1	9-6-63		685									272 2.72							BAR
		6-17-66		687												0.6				BAR
Lopez domestic	62/66-701	9-6-63		1150									66 1.35				1.8			BAR
		6-6-66		1320	7.9	23 1.87	96 3.22	0.7 0.02	0 0.00	622 10.19	32 0.67	69 1.38	22 0.33			1.2		850	1.5	4.06
Lopez irrigation	65/66-702	9-6-63		4010									901 25.62				2.6			BAR
		6-6-66		4260		726 31.38							948 26.74				2.6			BAR

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	Site well number and other number	Date sampled	Temp in °F	Specific conductance in µmhos/cm at 25 °C	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃		Analyzed by			
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)		Boron (B)	Silica (SiO ₂)		Other constituents	Total in ppm	Total
L. A. Rourke domestic and stock	417/66-2161	9-6-63		937				11.4	0.05	0	0.23	3.4	2.0			0.4						30.8
		4-4-64		990				192 8.35														30.8
	487/66-2781	9-6-63		546																		18.3
		4-4-64		443	7.7	29 1.25	20 2.43	16 0.770	2.0 0.05	0 0.00	2.33 3.82	3.4 0.407	2.0 0.45	2.0 0.45					233	154	3	146
O. White irrigation and stock	487/66-3381	9-6-63		5670																		18.3
		4-4-64		5590	7.6	203 13.12	404 25.702	384 10.270	12 0.062	0 0.00	4.99 8.03	0.4 0.200	1679 47.11	1.2 0.45					2430	1910	308	184
	487/76-210	9-6-63		19400																		18
		4-4-64		22700																		16
G. Hines domestic and stock	337/76-3001	9-6-63		845																		18.0
		4-4-64		983																		18.0
	337/76-803	9-6-63		922																		18.0
		4-4-64		895																		18.0
Oberg Lumber Co. domestic	337/76-1901	9-6-63		547																		18.0
		4-4-64		540	8.2	34 1.70	9.2 0.78	66 2.87	2.1 0.05	0 0.00	2.21 3.62	30 0.62	3.2 0.400	0.1 0.40					314	53	124	0
	337/76-1003	9-6-63		1780																		18.0
		4-4-64		1680	8.0	138 8.48	41 2.57	106 4.52	2.1 0.05	0 0.00	2.17 3.56	38 0.79	468 10.36	1.8 0.45					1040	28	574	295

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent sodium	Hardness as CaCO ₃		Analyzed by	
																		Total	N		C
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)	Boron (B)						
Mr. H. L. Clark, domestic, stock, and irrigation	53/78-33-2	9-4-63		860	8.2	2.8 0.19	1.8 0.11	19.2 8.35	1.3 0.03	3.5 0.20	19 0.230	66 1.36	0.2 0.101		0.2			94	94		
		3-11-64		855							67 1.39	0.2 0.101		0.2				94	94		
		9-2-63		626							2.2 1.18	0.2 0.101		0.2				94	94		
R. M. Carlson irrigation	62/70-6-1	9-2-63		636							2.2 1.18	0.2 0.101		0.2				94	94		
		9-2-63		636							2.2 1.18	0.2 0.101		0.2				94	94		
		9-2-63		636							2.2 1.18	0.2 0.101		0.2				94	94		
Mr. J. L. Somo domestic	12/66-8-1	9-11-63		1360							1.2 1.81	1.2 0.176		0.2				94	94		
		9-11-63		1360							1.2 1.81	1.2 0.176		0.2				94	94		
		9-11-63		1360							1.2 1.81	1.2 0.176		0.2				94	94		
Capt. county Airport domestic	46/66-2-1	9-11-63		802							0.2 2.75	0.2 0.176		0.2				94	94		
		6-11-64		810							0.2 2.75	0.2 0.176		0.2				94	94		
		9-11-63		793							0.2 2.75	0.2 0.176		0.2				94	94		
Mr. Rhodes domestic	46/66-4-1	9-11-63		793							0.2 2.75	0.2 0.176		0.2				94	94		
		9-11-63		793							0.2 2.75	0.2 0.176		0.2				94	94		
		9-11-63		793							0.2 2.75	0.2 0.176		0.2				94	94		
Mr. BACH domestic	46/66-5-1	9-11-63		768							0.2 2.75	0.2 0.176		0.2				94	94		
		9-11-63		768							0.2 2.75	0.2 0.176		0.2				94	94		
		9-11-63		768							0.2 2.75	0.2 0.176		0.2				94	94		
Pres. Harkness domestic	46/66-7-1	9-11-63		674							0.2 2.75	0.2 0.176		0.2				94	94		
		9-11-63		674							0.2 2.75	0.2 0.176		0.2				94	94		
		9-11-63		674							0.2 2.75	0.2 0.176		0.2				94	94		
Mr. Rogers domestic and stock	46/66-12-1	9-11-63		887							0.2 2.75	0.2 0.176		0.2				94	94		
		9-11-63		887							0.2 2.75	0.2 0.176		0.2				94	94		
		9-11-63		887							0.2 2.75	0.2 0.176		0.2				94	94		

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Percent lime	Hardness as CaCO ₃ Total ppm	Analyzed by
						equivalents per million													
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Bromide (Br)				
A. Domestic and stock	4-13-04	4-13-64	1570	72.5	7.5	1.26 0.278	0.02 0.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Domestic	4-13-04	4-13-64	1580			1.26 0.278	0.02 0.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C. Domestic	4-13-04	4-13-64	1630			1.26 0.278	0.02 0.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D. Domestic	4-13-04	4-13-64	1630			1.26 0.278	0.02 0.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Domestic and stock	4-13-04	4-13-64	1630			1.26 0.278	0.02 0.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Domestic and stock	4-13-04	4-13-64	1630			1.26 0.278	0.02 0.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
John Healy, Domestic and irrigation	4-13-04	4-13-64	1630			1.26 0.278	0.02 0.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. L. Looney, Domestic	4-13-04	4-13-64	1630			1.26 0.278	0.02 0.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L. W. Galt, Domestic	4-13-04	4-13-64	1630			1.26 0.278	0.02 0.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	
						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm at 25° C)	Mineral constituents in parts per million equivalents per million										Total dissolved solids in ppm	Per cent sodium in total	Hardness as CaCO ₃		Analyzed by			
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)			Boron (B)	Silica (SiO ₂)		Other constituents	Total ppm	N.C. ppm
	MIRAM																					
Rapo State Hospital domestic and institution	58/46-2072	4-13-64		846									165 4.65									DAE
													36 1.02			0.0						DAE
1. Flanagan domestic	56/46-2001	9-17-63		428									34 0.96			0.0						DAE
		4-13-64		429									19 0.55			0.2						DAE
John Wheeler domestic and stock	75/46-200	9-18-63		532												0.2						DAE
		4-13-64		540	21 0.60	26 0.74	13 0.36	22 0.61	0	202 5.81	30 0.84		17 0.47		0.3			260	13	207	41	DAE
																						DAE
1. N. S. 3000 municipal	45/46-107	9-4-63		1260									122 3.64			0.1						DAE
		3-6-64		939	10 0.30	10 0.30	182 5.27	14 0.39	6 0.17	283 8.04	27 0.80		0.9 0.26		0.1			619	85	66	0	DAE
Samson Ranch stock	45/46-1201	9-4-63		2860									629 17.74			2.6						DAE
		4-5-64		2780									367 10.36			2.2						DAE
1. Farmington domestic	35/46-1802	9-4-63		415									22 0.62			0.7						DAE
		4-4-64		641	13 0.37	13 0.37	29 0.82	21 0.59	11 0.31	209 6.06	34 0.98		11 0.31		0.8			322	58	40	0	DAE
1. Palmyra domestic	75/46-2003	9-4-63		907									91 2.68			0.2						DAE
		3-5-64		1120									95 2.76			3.2						DAE
1. 1. South domestic and stock	58/46-1271	9-4-63		605									20 0.59			0.8						DAE
		4-4-64		507									21 0.59			0.2						DAE

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp. in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent sodium in ppm	Hardness as CaCO ₃		Analyzed by
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)	Bran- (Br)	Silica (SiO ₂)			
	100204																			
M. Kiser Irrigation	SN/64-24K1	9-63		342																
		4-4-64		361																
Connolly domestic	SN/64-25P1	9-63		508																
		4-4-64		515																
N. Tarrid domestic	6N/64-2302	9-63		521																
		4-4-64		512	8.2	14 0.770	8.0 0.66	69 3.00	13 0.33	0 0.00	140 2.25	2.8 0.06	82 2.31	0.6 0.01		1.4			68	0
D. Stamos domestic	6N/64-26E1	9-63		438																
		4-4-64		435																
A. C. Faglani domestic	7N/44-30L1	4-15-64		90	6.7	5.2 0.26	3.4 0.28	6.6 0.29	1.9 0.05	0 0.00	34 0.56	7.1 0.15	6.8 0.19	1.4 0.02		0.0			27	0
		9-18-63		138																
J. Alcouffe domestic	9R/64-31Q1	4-16-64		134																
		9-18-63		935																
R. H. Archard domestic	9R/74-2301	4-16-64		928	7.3	13 0.65	4.5 0.37	154 6.70	12 0.31	0 0.00	183 3.00	0.8 0.02	179 3.05	1.0 0.02		12			51	0
		9-12-63		1420																
Mrs. Taylor domestic	3R/1E-481	9-12-63		1770																
		9-12-63																		
McDougal Livestock Co. stock	3R/1E-2101																			

ANALYSES OF GROUND WATER 1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	Mineral constituents in equivalents per million											Total dissolved solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Analyzed by			
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)				Silica (SiO ₂)	Other constituents	
McDougal Livestock Co. domestic	NDBM 3N/1E-22F2	9-12-63	1910		SUTHER-FAIRFIELD VALLEY (2-3) (Cont.)																
		5-12-64	1870	8.3	32 1.80	37 3.02	312 14.44	2.3 0.06	1 0.03	512 8.39	78 1.62	291 8.21	50 0.81	3.9	4.0		1070	76	231	0	DKR
Guy Stewart domestic	4N/1E-8F1	9-12-63	996									160 4.51		0.98			604	55	218	18	DKR
		5-12-64	1010	7.9	46 2.30	25 2.06	125 5.44	3.5 0.09	0 0.00	244 4.00	59 1.23	135 4.37	10 0.16	0.8	15						DKR
Fish and Game Comm. domestic	4N/1W-33A1	9-12-63	3620									853 24.06		9.9							DKR
		5-12-64	3710									853 24.06		9.9							DKR
W. F. Healy domestic	4N/2W-4D1	9-12-63	1400									80 2.26		1.4							DKR
		5-12-64	1410									71 2.00		1.2							DKR
Southern Pacific Railroad domestic	4N/2W-5D2	9-12-63	378									42 1.18		0.51			1900	66	366	220	USGS
		5-12-64	381									39 1.10		0.5							DKR
F. P. Smith domestic	4N/2W-9H1	9-12-63	3360	8.5	94 4.69	81 6.63	510 22.18	2.5 0.06	14 0.47	394 6.46	340 7.06	910 23.67	6.4 0.10	0.2 0.01	4.9	24					DKR
		9-12-63	1140									115 3.24		0.75							DKR
D. R. Mangels Irrigation	4N/2W-18H1	5-12-64	1160									105 2.96		0.6							DKR
		5-12-64	1080	7.7	94 4.69	36 2.98	94 4.09	1.2 0.03	0 0.00	415 6.80	124 2.38	77 2.17	1.3 0.02	0.2			652	35	384	44	DKR
	5N/1W-25B1	5-12-64	1490	8.0	90 4.49	32 2.66	163 7.09	1.0 0.02	0 0.00	250 4.10	12 0.25	335 9.45	11 0.18	0.6			808	50	358	153	DKR
		5-12-64	1040									52 1.47		1.2							DKR

TABLE E-1
ANALYSES OF GROUND WATER
1964

[illegible]

ANALYSES OF GROUND WATER 1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance in micro-mhos at 25° C	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total N C ppm	Analyzed by			
						Calcium (Ca)	Magne-sium (Mg)	Sodium (Na)	Potas-sium (K)	Bicar-bonate (HCO ₃)	Sul-fate (SO ₄)	Chlo-ride (Cl)	Ni-tro-ride (NO ₃)	Fluo-ride (F)	Brom-ine (Br)				Silica (SiO ₂)	Other constituents	
A. Sebastiani domestic	1N/14-7K1	8-13-63		2240	7.8	119	73	298	1.8	0	535	208	18	0.3	0.9	26	1570	52	598	232	USGS
						5.94	6.02	12.96	0.05	0.00	7.31	5.87	0.29	0.03							
G. Landis domestic	1N/14-29C1	8-13-63		1890	8.5	115	65	226	1.3	18	486	246	18	0.9	0.9	21	1180	47	550	122	USGS
						5.74	5.26	9.83	0.03	0.60	7.97	6.88	0.29	0.05							
Chester Hook domestic	1N/24-11N1	8-13-63		1240	8.1	86	35	133	3.0	0	506	143	0.9	0.5	1.2	38	715	44	358	0	DMR
						4.29	2.86	5.78	0.08	0.00	8.29	4.03	0.01	0.02							
John E. Wells domestic and irrigation	1N/24-13P1	8-13-63		1590	8.0	112	73	133	0.2	0	609	150	36	0.4	1.4	31	955	33	580	81	USGS
						5.59	6.00	5.78	0.02	0.00	9.98	4.23	0.38	0.02							
F. H. Durham domestic	2N/24-27R1	8-13-63		1060	8.5	47	36	276	3.9	18	490	279	3.4	0.2	6.7	44	982	70	238	0	USGS
						2.35	2.81	12.01	0.10	0.60	8.03	7.87	0.05	0.01							
Mrs. A. Buscaglia domestic	2N/24-30E1	8-13-63		3360	7.4	240	164	272	1.3	0	576	578	133	0.5	1.2	36	2330	32	1280	808	USGS
						11.98	13.52	11.83	0.03	0.00	9.44	16.31	2.15	0.02							
	2N/24-30E2	8-13-63		1750	8.3	136	86	113	1.7	6	538	279	17	0.2	0.5	29	1140	26	695	228	USGS
						6.79	7.11	4.32	0.04	0.20	9.15	7.87	0.27	0.01							

TABLE E-1

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total ppm	Analyzed by
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)			
	<u>NUBAH</u>																	
Manasse Block Tanning Company Industrial	1S/44-4A1	6-3-64		1360	8.5	95 4.74	65 3.35	97 4.22	1.1 0.03	12 0.40	339 3.64	99 2.06	24 0.39		0.1			DGR
Red Star Yeast Co. Industrial	1S/44-3472	6-3-64		993	8.5	32 1.60	29 2.36	125 5.44	2.2 0.06	8.5 0.28	251 4.34	27 0.56	8.8 0.14		0.2			DGR
National Lead Co. Industrial	2S/34-8Q1	6-3-64		1780	8.4	111 5.34	53 2.33	172 7.48	2.4 0.06	212 0.20	312 3.47	32 0.67	21 0.34		0.4			DGR
A. Ratto Irrigation	2S/34-28G1	6-19-64	67	921	8.3	60 2.99	25 2.08	91 3.96	2.3 0.06	0 0.00	231 4.11	45 0.94	138 3.89	0.4 0.01	0.4			DGR
Soares Irrigation	2S/34-3002	6-3-64		4210	7.8	337 17.81	148 12.16	268 11.66	8.2 0.21	0 0.00	238 3.90	128 2.66	2.6 35.54		0.4			DGR
Hohener Packing Co. domestic and Industrial	2S/34-33H3	6-19-64	65	635	8.1	34 1.70	19 1.56	81 3.52	3.4 0.09	0 0.00	315 5.16	36 0.75	27 0.76	0.8 0.01	0.4			DGR
Ralph A. Zobel Irrigation	2S/34-34A2	6-19-64	67	844	7.3	70 3.49	41 3.40	48 2.09	0.4 0.01	0 0.00	316 5.18	68 1.42	40 1.13		0.3			DGR
John A. Jacklich domestic	2S/34-34D3	6-19-64		586	8.5	38 1.90	22 1.82	61 2.65	1.2 0.03	6.9 0.23	289 4.74	25 0.76	2.3 0.46		0.4			DGR
Alameda Naval Air Station Irrigation	2S/44-3E1	6-3-64		790	7.6	33 1.65	19 1.59	106 4.61	1.7 0.04	0 0.00	288 4.72	33 0.69	87 2.45	1.0 0.02	0.3			DGR
Todd Shipyards Industrial	2S/44-3F1	6-3-64		913	7.8	40 2.00	25 2.08	48 2.18	1.7 0.04	0 0.00	241 3.95	23 0.48	1.3 4.32		0.3			DGR
Alameda High School Irrigation	2S/44-12R1	6-3-64		389	8.4	20 1.03	12 1.02	39 1.70	2.0 0.05	2 0.07	155 2.54	4.4 0.09	0.5 1.04		0.1			DGR
Ratto Irrigation	2S/44-25A1	6-3-64		761	8.4	26 1.30	16 1.18	118 5.13	2.4 0.06	3 0.17	234 3.84	40 0.83	99 2.79	0.9 0.01	0.4			DGR
Baystate Nursery Irrigation	3S/34-7J1	6-19-64	65	1000	8.0	78 3.89	41 3.36	78 3.39	2.4 0.06	0 0.00	319 5.23	96 2.00	81 2.28		0.3			DGR
Hoffman domestic	3S/34-8N2	6-30-64	74	1230	7.6	123 6.14	51 3.48	80 4.19	1.0 0.02	0 0.00	445 7.95	116 2.42	51 2.80		0.5			DGR
Kruger and Sons Industrial	3S/34-19B4	6-19-64	66	1190	8.3	116 5.79	46 3.62	79 3.44	1.2 0.03	0 0.00	410 6.72	86 1.79	129 3.64		0.3			DGR

ANALYSES OF GROUND WATER

1964

Owner and use	Site well number and other number	Date sampled	Temp in °F	Specific conductance in 25° C	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Per cent sodium in ppm	Hardness as CaCO ₃ ppm	Analyzed by				
					parts per million																	
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)	Other constituents	
EAST BAY AREA OF SANTA CLARA VALLEY (Cont.)																						
Al Bates Irrigation	35/24-30R14	6-19-64		1300	8.3	126 6.29	4.7 3.90	100 4.35	0.7 0.02	0	512 8.39	78 1.62	129 3.64	39 0.63		0.4		801	30	510	90	DMR
	35/24-31R1	6-29-64		656	8.5	18 0.90	23 1.92	88 3.83	2.0 0.05	4.5 0.15	254 4.16	61 0.85	51 1.44	0.3 0.00		0.4		361	57	161	0	DMR
	35/24-32R2	6-29-64	74	798	8.3	34 1.70	10 0.82	125 5.44	2.1 0.05	0	273 4.47	54 1.12	84 2.37	0.7 0.01		0.5		458	68	126	0	DMR
	35/34-1C3	6-19-64	74	1060	7.8	45 2.24	22 1.84	157 6.83	1.6 0.04	0	367 6.02	54 1.12	123 3.47	0.3 0.00		0.7		591	62	204	0	DMR
Trojan Powder Co. abandoned	35/34-1101	6-19-64	70	1330	8.1	63 3.12	26 2.15	172 7.48	3.3 0.08	0	282 4.62	42 0.87	262 7.39	0.8 0.01		0.2		721	58	265	34	DMR
	35/34-13R2	6-19-64		1910	8.1	113 5.64	77 6.31	220 9.57	1.0 0.02	0	678 11.11	196 4.08	166 4.68	52 0.84		1.2		1200	44	598	42	DMR
	35/34-2411	6-19-64	65	2040	8.4	135 6.74	92 7.56	186 8.09	1.7 0.04	10 0.33	472 7.74	150 3.12	351 9.90	38 0.61		0.7		1310	36	716	313	DMR
	35/34-2402	6-19-64		2170	8.1	140 6.99	91 7.49	172 7.48	0.5 0.01	0	472 7.74	116 2.42	351 9.90	54 0.87		0.4		1450	34	725	338	DMR
Zwarg Brothers Irrigation	45/14-7R2	10-31-63		1020									83 2.34									DMR
		5-20-64		1000									75 2.12									DMR
		10-30-63		2080									267 7.25									DMR
		5-5-64		1700									288 8.12	96 1.54								DMR
Southern Pacific Railroad Irrigation	45/14-7R1																					DMR
		5-5-64		1040									96 2.71									DMR
		5-5-64		1300	7.9	94 4.68	70 5.71	76 3.30	2.6 0.07	0	228 3.74	92 1.92	272 7.67	10 0.16		0.4 0.01		924	24	520	333	DMR
		5-5-64		1870																		DMR

TABLE E-1

ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance in micro-mhos at 25° C	pH	Mineral constituents in parts per million equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃		Analyzed by			
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potas-sium (K)	Bicar-bonate (HCO ₃)	Sul-fate (SO ₄)	Chlo-ride (Cl)	Ni-t rate (NO ₃)	Fluo-ride (F)	Boron (B)		Silico (SiO ₂)	Other constituents		Total ppm	N.C. ppm	
						EAST BAY AREA OF SANTA CLARA VALLEY (Cont.)																
Harold Faria Irrigation	4S/1W-18C2	5-7-64		953									70 1.97								DMR	
	4S/1W-18D1	10-14-63		860	8.2	46 2.32	61 3.02	53 2.30	1.8 6.05	0 0.00	321 5.26	81 2.27	34 0.55	0.1 0.01	0.3 0.01	15		628	24	367	104	DMR
	4S/1W-18G1	5-64		1220	8.1	106 5.32	66 3.43	72 3.13	2.5 0.06	0 0.00	276 4.34	125 2.61	20 0.32	0.1 0.01	0.4 0.01	14		820	22	537	310	DMR
	4S/1W-18H3	10-16-63		3200									879 24.80								DMR	
M. Rose domestic and irrigation	4S/1W-18N7	10-17-63		4110								1200 33.85									DMR	
	5-5-64			2600								684 19.29									DMR	
Santa Cruz-Portland Cement Co. irrigation	4S/1W-20D2	10-21-63		774								98 2.76									DMR	
	5-6-64			722								86 2.43									DMR	
California Nursery Co. industrial	4S/1W-20E1	10-24-63		1100								202 5.70									DMR	
	4S/1W-21F2	9-5-63		748	8.0	60 2.99	26 1.16	52 2.26	2.1 0.05	0 0.00	227 3.72	79 1.64	2.2 0.04	0.2 0.01	0.58 0.01	15	ABS 0.0 Al 0.02 As 0.00 Cr 46 6.00 Cu 0.00 Pb 0.00 Mn 0.00 Zn 0.00 Phenol 0.00 Fe 0.05 (Total)	436	30	258	72	DMR
	10-31-63			644								65 1.83									DMR	
	12-5-63			682	7.4	52 2.59	26 1.99	50 2.18	2.0 0.05	0 0.00	220 3.60	57 1.19	1.4 0.02	0.3 0.02	0.63 0.02	13	ABS 0.0 Al 0.13 As 0.00 Cu 0.00 Pb 0.00 Mn 0.00 Zn 0.00 Phenol 0.00 Fe 0.00 (Total)	390	32	229	49	DMR

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in parts per million											Total dissolved solids in ppm	Percent calcium and magnesium	Hardness as CaCO ₃ ppm	Analyzed by	
						equivalents per million															
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium sum (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)					Silica (SiO ₂)
Citizen's Utilities municipal	4S/1W-21F2	3-10-64	733	7.4	57 2,854	25 2,706	69 2,113	2.4 0.76	0 0.00	218 3,557	60 1,225	77 2,177	2.7 0.74	0.5		ABS 0.0 Al 0.02 As 0.00 Cr +6 0.00 Cu 0.00 Pb 0.00 Mn 0.00 Zn 0.00 Phenol 0.001 Fe 0.00 (Total) Se 0.00	378 30 245	66	DMR		
J. W. Stocking Irrigation and domestic	4S/1W-21K3	9-10-63	623	7.6	74 3,659	22 0,359	52 2,276	3.2 0.08	0 0.00	265 4,002	78 1,622	28 0,779	6.0 0.10	0.4 0.02	0.65	15	ABS 0.0 Al 0.02 As 0.00 Cr +6 0.00 Cu 0.00 Pb 0.00 Mn 0.00 Zn 0.00 Phenol 0.00 Fe 0.02 (Total) Se 0.00	430 33 256	62	DMR	
Alameda County Water District municipal	4S/1W-21F6	10-24-63	643	7.6	63 3,112	29 2,241	43 1,877	1.7 0.04	0 0.00	269 4,441	72 1,520	55 1,553	3.9 0.06	0.3 0.02	0.74	16	ABS 0.0 Al 0.03 As 0.00 Cu 0.02 Pb 0.00 Mn 0.00 Zn 0.00 Phenol 0.0001 Fe 0.02 (Total) Se 0.00	423 25 278	58	DMR	
		3-10-64	724	7.7	85 3,224	28 2,229	99 1,770	1.8 0.05	0 0.00	278 4,337	69 1,424	45 1,127	3.8 0.06	0.6		ABS 0.0 Al 0.03 As 0.00 Cr +6 0.00 Cu 0.02 Pb 0.01 Mn 0.00 Zn 0.02 Phenol 0.0001 Fe 0.02 (Total) Se 0.00	372 23 277	49	DMR		
		5-6-64																		DMR	

TABLE E-1

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance at 25° C	pH	Mineral constituents in parts per million										Total dissolved in ppm	Per cent solid in ppm	Hardness as CaCO ₃		Analyzed by	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)			Boron (B)	Silica (SiO ₂)		Other constituents
						LAST DAY AREA OF SANTA CLARA VALLEY (P-9) (CONT.)															
Alameda County water District municipal	45/11-21P6	6-12-64		734	7.9	67	26	48	2.0	0	236	69	62	4.4	0.6	ABS 1.00 Al 0.00 As 0.00 Cl 46 0.00 Co 0.00 Pb 0.00 Cu 0.00 Fe 0.00 Mn 0.00 Ni 0.00 Phenol 0.00 Fe 0.00 (total) Se 0.00	4.27	2.7	276	96	10R
						3.34	5.17	2.09	0.05	0.00	4.20	1.34	1.75	0.07	0.6		1.3	484	35	268	
L. F. Nortenstern Irrigation	45/11-21R2	10-30-63		700	8.4	50	33	66	1.9	4.8	305	68	55	9.3	0.8	1.3	4.20	2.7	262	70	10R
						2.20	2.86	2.87	0.05	0.16	5.00	1.33	1.55	0.15	0.6		1.3	484	35	268	
		5-6-64		831				68					46								
A. L. Hernandez Irrigation	45/11-21R2	10-21-63		820	8.6	16	12	175	6.0	13.6	336	76	67	3.2	2.1	1.8	4.20	2.7	262	70	10R
						0.82	1.42	7.60	0.15	0.32	5.84	1.38	1.89	0.04	0.6		1.3	638	76	112	
Joseph S. Datta	45/11-21R2	10-21-63		1690				3.8					78								10R
								15.14				2.20									
		5-5-64		825									46								10R
		5-5-64		888									49								10R
		10-30-63		620	8.3	48	29	53	1.9	3.6	181	87	59	4.2	0.6	1.5	382	35	211	5.7	10R
Alameda County water District municipal	45/11-28C14	10-24-63		688									40								10R
		5-5-64		653									26								10R
		10-16-63		1190									201								10R
J. M. Braga Irrigation and domestic	45/11-28D4	5-6-64		1010									137								10R
		10-6-63		730									66								10R

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent sodium in ppm	Hardness as CaCO ₃		Analyzed by	
																	Total	N		C
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)						
					LAS VEGAS, CLARK COUNTY, NEVADA (Cont'd.)															
Alameda County Water District municipal	45/14-2809	5-6-64		763								68 1,92	2.9 0.75							
Washington Township Hospital domestic	45/14-2815	10-63		485								26 0,608								
		5-5-64		581								26 0,608								
L. A. Williams domestic	45/14-2881	10-31-63		1,290	1.21 6,206	0.6 4,400	11.3 5,700	22.7 0,406	0 0,100	298 8,176	85 2,239	96 1,731	0.1 0,011	0.6 0,01	0.5			916 31	343 12.5	1029
City of Caliente domestic	45/14-2918	4-29-64		2720								539 13,776								
Alameda County Water District municipal	45/14-2912	5-6-64		9000	2.93 15,460	1.28 10,730	200 8,770	26.1 0,122	0 0,000	261 8,286	794 27,407	13 0,271	0.1 0,011	0.9 0,01	1.4			2,552 86	1,753 81.2	103
		4-29-64		1760								502 11,758								
Alameda County Water District municipal	45/14-3013	10-63		670								92 2,259	0.9 0,01	0.1 0,01	0.6 0,01	1.7		398 68	187 0	1038
		5-6-64		745								77 2,177								
Joseph Tallies	45/14-3001	9-11-63	70	660								29 0,82								
W. T. Hutchins domestic	45/14-3152	10-63		1200								29 0,82								
		5-8-64		1160								29 0,82								
Alameda County Water District municipal	45/14-3183	10-63		737								29 0,82								
		5-5-64		1110								29 0,82								
Frank Buchhart and domestic	45/14-3255	5-5-64		2660								29 0,82								

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Per-cent sulfate in ppm	Hardness as CaCO ₃ Total ppm	Analyzed by	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potas-sium (K)	Bicar-bonate (CO ₃)	Sul-fate (SO ₄)	Chlo-ride (Cl)	Ni-trate (NO ₃)	Fluo-ride (F)	Boron (B)					Silica (SiO ₂)
Alameda County Water District	NONE	10-63		1300															DMR	
		4-29-64		1570															DMR	
		5-11-64		4810															DMR	
		10-16-63		1130															DMR	
		4-29-64		1550															DMR	
J. and V. G. Panetto irrigation and domestic	45/14-381	10-22-63		1200	8.4	108 5.36	54 4.11	96 4.17	2.3 0.06	10.8 0.36	4.3 7.25	40 0.85	167 4.71	0.1 0.01	0.2	2.0		792 30	488 107	DMR
		5-4-64		1610															DMR	
		10-63		590	8.1	33 1.45	18 1.48	81 3.50	1.8 0.05	0 0.00	20.3 4.96	12 0.25	46 1.29	0.1 0.01	0.4	1.9		356 52	156 0	DMR
		5-27-64		713															DMR	
		10-17-63		580	8.5	18 0.92	13 1.13	103 4.47	2.0 0.05	12 0.40	28.1 4.60	21 0.45	43 1.04	0.2 0.01	0.3	2.3		398 48	103 0	DMR
Alameda County Water District municipal	45/14-3573	6-64		737															DMR	
		10-14-63		550	8.5	38 1.88	13 1.08	77 3.35	1.8 0.05	12 0.40	28.2 4.62	40 0.84	21 0.59	0.1 0.01	0.3	2.0		370 53	148 0	DMR
		5-5-64		602															DMR	
		6-29-64	70	650	8.3	21 1.05	7.7 0.63	116 4.96	1.8 0.05	0 0.00	31.2 5.11	44 0.73	76 2.02		0.4			389 74	84 0	DMR
		6-29-64	66	4430	8.1	118 14.47	118 9.71	422 17.36	7.2 0.18	0 0.00	20.3 3.33	135 2.81	1260 35.54	1.8 0.03	0.4			3220 43	1210 1044	DMR
J. P. & F. Bettencourt irrigation	45/24-902																		DMR	
		10-16-63		530	8.3	35 1.76	16 1.26	63 2.75	2.1 0.05	4.8 0.16	20.6 3.28	39 0.82	50 1.41	0.1 0.01	0.3	2.3		332 47	151 0	DMR
Holly Sugar industrial	45/24-10C1																		DMR	

ANALYSES OF GROUND WATER
1964

-201-

1964

-203-

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Core sample	Temp in °F	Specific conductance (micro-mhos/cm at 25° C)	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃		Analyzed by			
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)		Boron (B)	Silica (SiO ₂)		Other constituents	Total ppm	NC ppm
	<u>NDBEN</u>																				
State of California	4S/30-21B1	7-10-63		1990	92 4,59	0.6 0.05	32.6 14,18	14 0.36	10 0.23	208 3,41	57 1,19	500 14,10	0.9 0.01	0.3 0.02	0.27	1.6	1090	74	232	45	DNR
E. R. Blacow irrigation, stock, and domestic	5S/18-40L	10-17-63		587								20 0.56									DNR
	5-4-64	587										20 0.56									DNR
J. E. Trinidad stock and irrigation	5S/18-40L	10-23-63		2000	170 8,50	88 7,18	155 6,75	3.5 0.09	0 0.00	264 4,34	125 2,61	539 15,21	0 0.00	0.1 0.01	2.0	1.5	1450	30	784	567	DNR
	5-5-64	2360										563 15,88									DNR
L. Nilani irrigation	5S/18-46L	10-23-63		825	65 3,24	23 1,86	99 4,30	2.5 0.06	4.2 0.14	273 4,78	32 0.67	149 4,19	2.1 0.03	0.1 0.01	0.3	1.5	622	45	255	24	DNR
	5-7-64	2120										533 15,03									DNR
Alameda County East Bay Title Insurance Company domestic, duck pond	5S/18-92L	10-23-63		950	36 1,70	40 3,33	116 5,05	2.3 0.06	0 0.00	231 3,78	42 0.88	201 5,65	0 0.00	0.2 0.01	0.5	2.2	588	50	251	62	DNR
	5-5-64	1980										409 11,54			0.5						DNR
A. F. Brosius irrigation and domestic	5S/18-98L	10-22-63		860	46 2,28	43 3,47	87 3,80	4.3 0.11	0 0.00	281 4,60	56 1.17	135 3,81	3.6 0.06	0.1 0.01	0.3	2.5	596	39	287	57	DNR
	5-64	963										95 2,68									DNR
W. B. Brinker irrigation	5S/18-98L	5-64		1490								69 1,94									DNR
Lawrence Roland, Jr. water ponds	5S/18-156L	5-64		957								317 8,94									DNR
P. G. & E. Industrial and domestic	5S/18-176L	10-17-63		570	42 2,08	13 1,08	69 3,00	2.5 0.06	3.0 0.10	295 4,84	79 0.60	28 0,81	1.3 0.02	0.1 0.01	0.3	1.8	364	48	158	0	DNR
	5-64	675										28 0,79									DNR
Phillip Enciso stock and domestic	5S/20-18L	10-24-63		520	19 0,94	3.3 0,27	113 4,90	1.4 0,04	1.2 0,40	283 4,64	25 0,53	0 0,00	0 0,00	0.1 0.01	0.4	2.0	370	80	60	0	DNR

ANALYSES OF GROUND WATER 1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Per cent total in ppm	Hardness as CaCO ₃ Total ppm	N.C. ppm	Analyzed by
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					
Phillip Backisco stock and domestic Westvaco Chemical Co. Industrial	ND084 5S/20-1B1	5-6-64		582														0.4		04R
		5-7-64		435														0.2		04R
J. R. Cowhio domestic	5S/1E-31E1	9-21-63	68	643														0.4		04R
		8-21-63	64	586														0.2		04R
Winston Bros. domestic	6S/1E-7C1	8-27-63	66	828														2.6		04R
		9-25-63	66	954	8.1		31 1.55	31 2.59	139 6.05	2.0 0.05	0 0.00	379 6.21	102 2.23	58 1.64	1.4 0.02			1.4		04R
Azzarelio Irrigation	6S/11-28A4	8-21-63	64	590														0.4		04R
		9-23-63	66	540														0.2		04R
Shattuck Irrigation	6S/1E-30H1	8-22-63	70	632														0.1		04R
		8-16-63	66	450														0.1		04R
R. Murray domestic	6S/14-13S3	8-31-63	70	1190														0.8		04R
		9-25-63	60	442														0.2		04R
N. Muchado Irrigation and domestic	6S/14-17H1	8-23-63	64	542														0.1		04R
		8-26-63	68	548														0.2		04R
A. French Irrigation and domestic	6S/24-9H1																			04R
																				04R

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in F	Specific conductance in F/mhos at 25° C	pH	Mineral constituents in equivalents per million										Total solids in ppm	Per cent solids in ppm	Hardness as CaCO ₃ Total ppm	Analyzed by		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Calcium carbonate (CaCO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Silica (SiO ₂)	Other constituents
MDS&T California Water Service Company municipal Horn Bros. H. Mantella irrigation and domestic W. S. Bennett domestic and irrigation J. A. Baptista domestic and irrigation Maynair Packing Co. irrigation A. Jaca irrigation M. F. Douglass domestic Yonemoto domestic and irrigation H. Gerdas domestic T. Yuki irrigation L. F. Farcone irrigation	65/24-2041	9-30-63		571											304		DMR				
	65/24-2443	9-26-63	68	516												312		DMR			
	65/24-3441	9-26-63	70	601														DMR			
	75/14-511	8-26-63	68	648												392		DMR			
	75/1E-208	8-15-63	70	692	7.9	25 1.25	31 2.53	78 3.39	1.2 0.03	0 0.00	292 4.78	58 1.21	37 1.00	2.8 0.04	0.2	0.2	47 189	0	DMR		
	75/1E-2542	8-16-63	72	1032	8.5	27 1.35	101 8.32	56 2.44	1.1 0.03	20 0.67	479 7.85	20 0.42	98 2.76	12 0.19	0.2	596 20	484 58	DMR			
	75/14-3511	9-27-63	60	443	7.9	36 1.80	22 1.74	17 0.71	1.3 0.03	0 0.00	157 2.57	62 1.29	11 0.39	10 0.16	0.1	269 17	182 53	DMR			
	75/2E-68	8-13-63	72	882											0.2	543		DMR			
	75/2E-1881	9-19-63	64	1160											0.4	695		DMR			
	75/2E-1911	8-14-63		850											0.2	493		DMR			
75/2E-330	9-18-63	62	864											0.2	506		DMR				
85/14-106	9-6-63	67	409	8.1	40 2.00	17 1.36	19 0.83	1.2 0.03	0 0.00	179 2.93	28 0.58	18 0.51	9.0 0.14	0.1	231 20	169 22	DMR				
85/14-1362	9-10-63	64	445											0.1			DMR				
85/14-1581	9-10-63	64	678	8.2	56 2.79	38 3.16	29 1.26	1.4 0.04	0 0.00	242 3.97	59 1.23	35 0.99	52 0.84	0.2	416 17	298 100	DMR				
85/1E-41	8-6-63	65	477											0.1	282		DMR				

1964

-207-

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	Mineral constituents in parts per million equivalents per million										Total dissolved solids in ppm	Per- cent sodium in ppm	Hardness as CaCO ₃ Total N.C. ppm	Analyzed by			
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)	Other constituents
	MEAN																				
Neilon	3S/1E-9L1	6-30-64	64	1440	8.0	80 5.09	92 4.00	2.8 0.07	0	508 8.33	94 1.96	170 4.80	19 0.31		1.7		816	25	582	166	DMR
Jamison Irrigation	3S/1E-11E1	6-30-64	66	1300	8.3	81 4.69	53 2.30	2.4 0.06	0	449 7.36	45 0.94	177 4.99	14 0.22		0.7		743	17	569	201	DMR
Ed Hageman domestic and irrigation	3S/1E-11H1	6-30-64	66	779	8.2	9.4 6.14	33 1.44	1.8 0.05	0	316 5.18	40 0.83	63 1.78	20 0.32		0.4	ABS 0.0	451	17	346	87	DMR
California Rock and Gravel Company domestic	3S/1E-13P2	6-30-64		696	8.1	1.2 4.84	52 2.26	1.6 0.04	0	275 4.51	44 0.92	58 1.64	1.4 0.02		0.9	ABS 0.0	364	31	247	21	DMR
H. J. Kaiser Ind. domestic	3S/1E-13L1	6-30-64	64	546	8.1	3.6 4.34	25 1.09	1.1 0.03	0	232 3.64	36 0.75	31 0.87	13 0.21		0.2		304	19	232	50	DMR
M. Kruse Irrigation	3S/1E-17H2	6-30-64	66	1150	7.8	63 5.34	42 1.83	2.2 0.06	0	412 6.75	72 1.50	131 3.70	14 0.22		0.4		686	15	528	190	DMR

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conduct- ance micro- mhos at 25° C	pH	Mineral constituents in parts per million											Total dissolved solids in ppm	Per- cent solid in ppm	Hardness as CaCO ₃ Total N.C. ppm	Analyzed by		
						Calcium (Ca)	Magnes- ium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Nit- rate (NO ₃)	Fluo- ride (F)	Boron (B)					Silica (SiO ₂)	Other constituents
S. H. Gundrup domestic and irrigation	MEDIAN 11S/2E-27A1	9-26-63	62.9																			
		5-21-64	71.5	8.2	78 3.89	23 1.72	46 2.00	1.2 0.04	0 0.00	290 4.75	51 1.06	56 1.28	0.8 0.01		0.0		408	26	281	4.3	DGR	
Frank T. Blake irrigation	12S/1E-11L1	9-26-63	430																		DGR	
		9-26-63	66																		DGR	
Sunset Beach Park domestic	12S/1E-11N1	5-20-64	428	8.0		28 1.40	24 2.00	22 0.96	1.7 0.04	0 0.00	185 3.03	23 0.48	21 0.59	8.5 0.14		0.0		255	22	170	18	DGR
		9-26-63	66																		DGR	
F. Rocha, Jr. irrigation	12S/1E-14L1	5-20-64	396																		DGR	
		9-26-63	605																		DGR	
E. L. Padden domestic	12S/1E-23R1	9-26-63	524																		DGR	
		9-26-63																			DGR	
H. Trafton irrigation	12S/1E-24G1	5-20-64	518	8.1		35 1.75	30 2.55	28 1.22	3.4 0.10	0 0.00	255 4.18	28 0.58	22 0.62	0.2 0.01		0.1		304	22	210	1	DGR
		5-20-64	466																		DGR	
domestic	12S/1E-24Q	9-26-63	1240	8.6		96 4.79	82 6.77	73 3.18	2.0 0.05	28 0.93	558 8.23	153 3.19	70 1.97	1.3 0.02		0.4 0.02		782	22	578	120	OSGS
		5-21-64	1260																		DGR	
A. D. Fagunden domestic and irrigation	12S/2E-11E4	6-11-64	494	8.2		78 3.89	40 0.33	26 1.15	2.2 0.06	0 0.00	242 3.97	34 0.71	16 0.45	0.4 0.01		0.1		285	21	211	13	DGR
		9-26-63	453																		DGR	
Kellon irrigation	12S/2E-18J1	5-20-64	452	8.0		42 2.10	18 1.52	27 1.17	1.9 0.05	0 0.00	214 3.51	36 0.75	13 0.37	0.4 0.01		0.0		275	24	181	6	DGR

TABLE E-1

ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Pay-Per-Kent sum	Hardness as CaCO ₃		Analyzed by	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)			Boron (B)	Silica (SiO ₂)		Other constituents
E. Yappert Irrigation and domestic Ranger domestic	108/2E-18L1	5-21-64		454																DMR	
	125/2E-30E1	8-12-63	60	14600																DMR	
	125/2E-31A1	8-14-63	66	683																DMR	
	9-26-63			702																DMR	
	5-20-64			687																DMR	
Johnson Irrigation	125/2E-32K1	9-26-63		585																DMR	
	5-20-64			549	7.3	25 1.75	18 1.49	49 2.13	2.5 0.06	0 0.00	113 1.85	86 2.43	22 0.35		0.0			324	43	44	DMR
F. Capurro & Sons domestic and irrigation	135/2E-6F1	9-25-63		1330																DMR	
	5-20-64			1370	8.3	18 0.90	7.0 0.58	243 10.57	5.7 0.14	0 0.00	220 3.60	256 7.22	0.7 0.01		0.2			759	87	0	DMR
GILROY-BOLLISTER BASIN (3-3)																					
T. Andrade Irrigation	95/3E-25N3	6-17-64		484																DMR	
	105/3E-1E2	6-17-64		467																DMR	
J. Orlando Irrigation and domestic	105/3E-23J1	6-17-64		448	7.5	31 1.55	26 2.15	18 0.78	0.8 0.02	0 0.00	192 3.23	21 0.59	36 0.38		0.0			276	17	4.0	DMR
	105/3E-26J1	6-17-64		432																DMR	

TABLE E-1

ANALYSES OF GROUND WATER

1964

[illegible]

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent sodium in ppm	Hardness as CaCO ₃ Total ppm	Analyzed by			
					equivalents per million																
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)	Other constituents
NORON	12S/SE-29C3	9-18-63		2510 8.2			235 10.22	3.6 0.09					31.7 8.34		1.5			1670 37	850	OKR	
	12S/SE-29J1	9-18-63	65	2740 8.4			455 19.79	7.6 0.19					426 12.02		1.3			1680 73	353	OKR	
	12S/SE-33A1	6-18-64		1900 7.9	89 4.44	135 11.12	154 6.70	4.2 0.11	0	894 14.65	227 4.73	101 2.85	7.6 0.12		1.0			1230 30	779 46	OKR	
	12S/SE-36A1	6-18-64		1330 8.3	14 0.70	16 1.28	274 11.92	2.5 0.06	0	492 8.06	67 1.39	145 4.09	1.2 0.02		1.5			785 85	99 0	OKR	
Mrs. S. Brandon domestic and stock	12S/SE-79J2	6-17-64		415 7.9	16 0.80	12 0.56	51 2.22	3.5 0.09	0	219 3.59	0.2 0.00	22 0.62	0.8 0.01		0.8			287 54	88 0	OKR	
	12S/SE-31B1	6-18-64		2450 8.1	41 2.04	56 4.61	397 17.27	3.2 0.08	0	536 8.78	109 2.27	469 13.23	0.4 0.01		3.0			1380 72	333 0	OKR	
	13S/SE-31J1	6-16-64		1440 7.9	60 2.99	78 6.72	130 5.66	3.3 0.08	0	375 6.15	273 5.68	122 3.44	9.2 0.15		0.8			928 37	471 163	OKR	
	13S/SE-11B5	6-16-64		1540			285 5.93					127 3.58			0.9						OKR
V. Lompo irrigation	13S/SE-11G1	6-16-64		1420			222 5.25					116 3.27			0.8						OKR
Monterey Bay Salt Co. domestic and industrial	13S/SE-78J1	8-23-63	68	924								98 2.76			0.2						OKR
DeIfino & Calcagno domestic and stock	13S/SE-17H1	8-23-63	65	1580 8.1	70 3.49	42 3.72	160 6.96	1.3 0.33	0	237 3.88	39 0.81	344 9.70	3.3 0.05		0.2			931 49	346 152	OKR	
T. Leonardini domestic and irrigation	13S/SE-19R1	8-22-63	69	890 8.2	53 2.66	28 2.30	101 4.40	3.1 0.08	0	236 3.86	29 0.59	178 5.02	0.9 0.01		0.1 0.01	0.2	22	600 47	248 55	OKR	

SALINAS VALLEY (3-4)

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in ————— parts per million —————										Total dissolved solids in ppm	Hardness as CaCO ₃ Total ppm	Analyzed by		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)				Boron (B)	Silica (SiO ₂)
						SALTWATER VALLEY (3-4-6) (Cont'd.)														
J. Tate domestic and irrigation	138/2E-2002	8-23-63	65	1200	7.8	87 4.34	36 2.93	91 3.96	3.8 0.10	0	166 2.72	60 1.25	227 6.40	46 0.74		0.0		743 35	364 228	DNR
Permanente Industrial	138/2E-2904	8-23-63	66	1290				160 6.96												DNR
J. J. King irrigation	138/2E-3102	8-22-63	70	770	8.1	46 2.28	16 1.30	104 4.50	3.1 0.08	0	222 5.64	30 0.62	144 4.05	1.3 0.02	0.1 0.01	0.3 37		476 55	179 0	DNR
Nolera Estate domestic	138/2E-3102	8-22-63	69	545	8.3	45 2.24	12 0.99	61 2.65	2.4 0.06	4.8 0.16	228 3.74	17 0.36	64 1.80	1.7 0.03	0.1 0.01	0.1 32		330 22	162 0	DNR
E. Ballone irrigation	138/2E-3102	8-22-63	63	1400	8.1	93 4.67	50 2.06	135 5.87	6.5 0.12	0	179 2.94	62 1.30	364 10.25	0.8 0.01	0.2 0.01	0.2 33		886 40	436 289	DNR
irrigation	138/2E-3202	8-27-63	73	648	8.2	45 2.24	20 1.64	62 2.70	3.0 0.08	0	244 4.00	12 0.25	78 2.20	3.1 0.05		0.1		379 40	194 0	DNR
O. P. Overhouse irrigation	138/2E-3201	8-22-63	62	515	8.3	44 2.20	12 1.02	55 2.40	2.5 0.06	8.4 0.28	207 3.40	15 0.32	60 1.69	0.8 0.01	0.1 0.01	0.1 32		306 42	161 0	DNR
Nolera Estate irrigation	138/2E-3201	8-29-63	71	564				68 2.96												DNR
C. Bissotti irrigation and domestic	138/2E-3301	8-27-63	66	890	8.0	83 4.14	27 2.23	56 2.44	3.9 0.10	0	241 3.95	97 2.02	102 2.88	10 0.16		0.0		551 27	319 121	DNR
Mrs. L. Martin irrigation and domestic	145/2E-401	8-21-63	73	570	8.4	33 1.66	12 1.00	81 3.50	2.4 0.06	3.0 0.10	220 3.60	40 0.84	60 1.69	2.1 0.03	0.1 0.01	0.2 39		364 56	133 0	DNR
F. Struve irrigation	145/2E-402	8-21-63	65	561				64 2.78												DNR
Dorothy V. Orcutt irrigation	145/2E-401	9-30-63	68	1050	8.1	86 4.29	32 2.68	26 2.87	4.5 0.12	0	181 2.97	105 2.19	162 4.73	1.4 0.02		0.1		628 29	349 201	DNR
E. C. Eaton irrigation	145/2E-1201	8-22-63	62	500	8.5	58 2.86	17 1.39	37 1.60	1.9 0.05	12 0.40	230 3.76	18 0.38	42 1.19	0.2 0.08	0.1 0.01	0.1 27		316 27	213 5	DNR
L. A. Wilder domestic	145/2E-1401	8-22-63	62	627																DNR
Monterey County Bank irrigation and domestic	145/2E-1511	8-22-63	64	587																DNR

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conduct- ance in micro-mhos at 25° C	Mineral constituents in										Total dissolved solids in ppm		Hardness as CaCO ₃		Analyzed by
					parts per million										Fluo- ride (F)	Boron (B)	Silica (SiO ₂)	Other constituents	
Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sum (K)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- tro- gen (NO ₃)	equivalents per million											
	<u>NORFOLK</u>																		
John W. Orcutt irrigation	14S/2E-16A1	8-23-63	67	664															DRR
M. T. DeSerpa irrigation	14S/2E-24E1	8-28-63	68	621 8.1	4.7 2.34	1.8 1.46	52 2.26	3.1 0.08	203 3.33	38 0.79	69 1.95	3.0 0.05			0.1		378 37	140 24	DRR
M. T. DeSerpa irrigation	14S/2E-25B1	8-28-63	64	1090											0.2				DRR
D. P. McFadden irrigation	14S/2E-33Q1	8-20-63	66	440 8.3	48 2.41	1.3 1.06	29 1.06	2.9 0.07	147 2.42	88 1.85	18 0.49	0.8 0.01	0.2 0.01		0.1 33		300 26	173 48	DRR
A. Lahiri irrigation and domestic	14S/3E-30E1	8-22-63	62	1750 8.0	120 6.01	76 6.26	167 7.23	5.3 0.14	307 5.04	235 4.91	326 9.21	10 0.16	0.1 0.01		0.3 29		1218 37	613 361	DRR
P. G. & E. municipal	14S/3E-33C1	8-19-63	64	660 8.3	50 2.47	2.5 2.08	58 2.50	2.8 0.07	197 3.24	73 1.52	74 2.09	4.3 0.07	0.2 0.01		0.1 26		444 35	227 59	DRR
L. R. Stetting irrigation and domestic	15S/2E-1A3	8-24-63	64	454 8.2	47 2.34	1.9 1.04	26 1.13	3.4 0.09	162 2.66	46 1.37	15 0.42	2.0 0.02			0.0		251 25	169 36	DRR
L. Jacks irrigation	15S/2E-2Q1	7-63	62	1010 8.0	62 3.09	57 4.65	75 3.26	4.1 0.10	257 4.21	217 4.52	76 2.14	0.5 0.01	0.1 0.01		0.2 48		684 29	387 176	USGS
	15S/3E-4K3	8-12-63	66	674											0.2				DRR
F. Giottini domestic and irrigation	15S/3E-7D1	8-13-63	60	1240 8.1	92 4.58	72 5.85	82 3.55	4.7 0.12	246 4.04	314 6.54	130 3.67	0 0.00	0.1 0.01		0.2 13		976 25	521 319	DRR
K. R. Stetting irrigation	16S/4E-24A1	8-1-63	60	1610 7.8	103 5.14	73 5.99	134 5.83	4.9 0.12	196 3.21	439 9.14	127 3.58	55 0.89			0.4		1120 34	557 346	DRR
J. C. Twisselman irrigation	16S/4E-25K1	8-1-63	60	1130											0.2				DRR
Field Estates	17S/5E-14D1	5-25-64		723 8.1	59 2.94	19 1.58	59 2.57	3.5 0.09	218 3.57	76 1.58	70 1.97	15 0.24			0.0		422 36	226 47	DRR
N. Baker irrigation	17S/6E-27K1	7-29-63	67	1370 8.2	129 6.44	53 4.35	95 4.13	3.9 0.10	290 4.75	348 7.24	95 2.66	4.8 0.08			0.3		978 27	540 302	DRR

1964

-215-

TABLE E-1

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance in micro-mhos at 25° C	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent sodium in ppm	Hardness as CaCO ₃ Total N.C. ppm	Analyzed by	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)
	MEDIAN																			
	26S/15E-281	9-24-63	72	2146	8.4	36 1.80	5 0.41	442 19.22	4 0.10	24 0.80	283 11.03	530 23.10	182 8.20	2.0 0.03	0.5 0.03	1.85 0.08	28	1370	111	6AR
	26S/15E-20R1	9-26-63	73	374	7.8	42 2.10	4 0.33	32 1.39	3 0.08	0 0.00	156 6.65	31 1.28	17 0.78	13 0.58	0.2 0.01	0.04 0.00	47	265	122	6AR
	26S/16E-3181	9-26-63	74	1634	7.9	34 1.70	21 1.73	310 13.48	2 0.05	0 0.00	339 15.36	354 16.02	107 4.88	52 2.30	1.2 0.05	2.04 0.09	32	1060	172	6AR
	27S/12E-3C2	9-26-63	70	822	8.1	46 3.29	40 3.29	48 2.09	2 0.03	0 0.00	329 14.59	15 0.68	104 4.73	10 0.45	0.3 0.01	0.16 0.00	45	510	329	6AR
	27S/12E-2992	7-10-63	63	1170	7.4	180 8.98	34 2.80	46 2.00	1 0.03	0 0.00	324 14.51	312 13.80	73 3.20	7.3 0.32	0.1 0.01	0.09 0.00	23	904	589	6AR
	27S/12E-2993	7-10-63	69	970	7.8	124 6.19	41 3.37	38 1.65	1 0.03	0 0.00	311 14.10	231 10.40	48 2.10	3.2 0.13	0.1 0.00	0.11 0.00	21	724	478	6AR
	27S/12E-2994	7-10-63	59	770	7.5	87 4.34	37 3.04	32 1.39	2 0.05	0 0.00	293 13.20	154 6.80	30 1.30	2.7 0.11	0.2 0.01	0.13 0.00	18	548	369	6AR
	27S/12E-32C3	7-11-63	62	900	7.4	113 5.64	38 3.13	32 1.41	1 0.03	0 0.00	316 14.15	169 7.52	41 1.75	3.2 0.14	0.2 0.01	0.11 0.00	23	654	439	6AR
	27S/12E-32C4	7-11-63	60	1210	7.6	131 6.54	79 6.50	46 2.00	2 0.05	0 0.00	360 16.30	192 8.75	62 2.75	1.6 0.07	0.2 0.01	0.10 0.00	21	1084	653	6AR
	27S/12E-32Q1	7-10-63	63	770	8.0	69 3.44	49 4.03	35 1.52	1 0.03	0 0.00	253 11.30	180 8.15	1.07 0.45	0.00 0.00	0.2 0.01	0.08 0.00	19	620	374	6AR
	27S/13E-991	9-26-63	73	653	8.4	14 0.70	9 0.76	130 5.65	2 0.05	0 0.00	327 14.50	12 0.50	23 0.95	4.0 0.16	0.4 0.02	0.38 0.01	44	410	72	6AR
	27S/15E-10R2	9-25-63	63	635	7.7	86 4.29	12 0.99	35 1.52	2 0.05	0 0.00	305 13.80	41 1.85	24 1.08	26 1.10	0.2 0.01	0.10 0.00	41	390	264	6AR
	27S/15E-13A1	9-25-63	72	4478	7.5	196 9.78	72 5.92	720 31.31	5 0.13	0 0.00	290 13.10	927 41.75	840 37.69	22 0.95	0.9 0.04	2.50 0.10	32	3008	786	6AR
	27S/16E-28N1	9-25-63	70	772	8.6	34 1.70	13 1.07	110 4.78	3 0.08	0 0.00	293 13.25	60 2.70	56 2.40	12 0.50	0.6 0.02	0.44 0.01	24	482	139	6AR
	28S/12E-432	7-10-63	58	650	7.7	106 5.29	34 2.80	25 1.09	1 0.03	0 0.00	229 10.30	136 6.00	22 0.95	2.3 0.10	0.1 0.00	0.09 0.00	22	480	405	6AR
	28S/12E-10R2	9-27-63	62	875	7.8	86 4.29	48 3.95	38 1.65	2 0.05	0 0.00	327 14.50	155 6.90	49 2.18	1.5 0.06	0.4 0.01	0.04 0.00	28	540	412	6AR

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F at 25° C	Specific conduct- micro-mhos at 25° C	Mineral constituents in parts per million										Total dis- solved solids in ppm	Per- cent sodium	Hardness as CaCO ₃		Analyzed by			
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)			Boron (B)	Silica (SiO ₂)		Other constituents	Total	N.C. ppm
MIDLAND	288/12E-14J2	7-9-63	62	570	8.0	35 2,350	26 1,113	1 0.03	0 0.00	244 4,000	75 1,56	28 0.779	5.2 0.08	0.2 0.008	0.05 0.005	20	446	269	DNR			
	288/12E-24F2	7-9-63	62	490	7.7	46 2,330	23 1,177	1 0.03	0 0.00	191 3,113	64 1,233	22 0.62	5.7 0.09	0.2 0.009	0.05 0.005	18	356	210	DNR			
	288/12E-25B1	7-10-63	61	540	7.7	51 2,354	33 2,771	1 0.03	0 0.00	210 3,442	85 1,777	20 0.56	9.2 0.15	0.2 0.009	0.0 0.005	22	400	263	DNR			
	288/12E-25B2	7-10-63	61	530	7.5	50 2,550	27 1,404	1 0.03	0 0.00	217 3,556	69 1,444	20 0.56	6.8 0.11	0.1 0.009	0.09 0.01	17	340	236	DNR			
	288/13E-31B2	9-27-63	68	1117	7.7	91 4,554	70 5,776	1 0.03	0 0.00	451 7,339	178 3,771	66 1.86	1.0 0.02	0.4 0.009	0.01 0.005	24	675	515	DNR			
	288/16E-14N1	9-25-63	62	561	7.9	47 2,335	35 1,881	1 0.03	0 0.00	168 2,775	102 2,112	24 0.68	11 0.18	0.4 0.009	0.04 0.005	35	340	208	DNR			
B. Odello irrigation (Carnel Sewage Treatment Plant industrial)	16S/14E-13L1	8-7-63	62	735	8.1	70 3,459	22 1,778	47 2,006	0 0.00	218 3,557	96 2,700	62 1,735	1.1 0.02	0.1 0.009	0.1	450	27	264	85			
	16S/14E-13L2	8-7-63	61	1000	8.1	88 4,39	25 2,06	49 3,44	0 0.00	265 4,34	106 2,21	126 3,355	1.4 0.02	0.4 0.009	0.1	611	34	323	106			
	16S/14E-13L1	8-7-63	62	708								57 1.61	13 0.37						DNR			
	16S/14E-13L1	8-7-63	75	326								51 1.44	13 0.37						DNR			
	16S/14E-13L1	8-7-63	60	812	8.0	89 4,424	23 1,93	48 2,109	0 0.00	257 4,21	128 2,66	51 1.44	1.4 0.01	0.9 0.009	0.1	516	24	319	108			
	16S/14E-17C1	8-7-63	66	1200	8.2	124 6,119	29 2,400	5 0.13	0 0.00	262 4,300	170 3,34	131 3,170	1.4 0.00	0.9 0.009	0.1	767	31	540	150			
B. Odello irrigation	16S/14E-13L1	8-7-63	61	650								51 1.44	13 0.37						DNR			
	16S/14E-13L1	8-29-63	61	564								39 1.10	13 0.37						DNR			

RADIOASSAYS OF GROUND WATER

WELL NUMBER	DATE SAMPLED	DATE ANALYZED	RADIOASSAY IN PICO CURIES PER LITER						GROSS ACTIVITY	
			SUSPENDED ACTIVITY		DISSOLVED ACTIVITY					
			ALPHA	BETA	ALPHA	BETA	ALPHA	BETA		
			SANTA CLARA VALLEY 2-9 (East Bay)							
4S/1W-21F2	9-5-63	11-12-63								4.6 ± 4.6
4S/1W-21F2	12-5-63	1-8-64	0 ± 0.5	1.9 ± 6.0	0 ± 0.5			1.6 ± 6.0		
4S/1W-21F2	3-10-64	3-17-64 3-16-64	0 ± 0.3	0 ± 6.0	0.1 ± 0.4			1.1 ± 6.0		
4S/1W-21F2	6-12-64		-0.10 ± 0.80	-4.16 ± 7.57	-2.12 ± 0.91			11.57 ± 12.77		
4S/1W-21P6	12-5-63	1-9-63 1-8-64	0 ± 0.5	7.0 ± 8.0	0 ± 0.5			4.2 ± 5.9		
4S/1W-21P6	3-10-64	3-17-64 3-16-64	0 ± 0.4	0.44 ± 6.1	0 ± 0.4			0 ± 6.1		
4S/1W-21P6	6-12-64		0.70 ± 1.05	-7.37 ± 8.42	0.0 ± 2.61			-19.35 ± 12.33		



0674
2159
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8680
9675

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1766
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4022-1
4025
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5853
5844
5973
5973-1
6610
7190
7249
7719
7755
7835
8447
9189
9473

0322
2362
3238
3502
3591
3722
4555
5795
6650
6926
7150
7668
7669
7716
7845-10
7959-10
8276
8338
8338-01
8446
8446-01

0360-03
1034
4963
5017
6703
6706
7672
7714
8849
9221

0790
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1534
5184
6856
7249-21
7539-01
7731

5120-03
5869
7024

9179



LEGEND

TYPE OF DATA

- ● ○ PRECIPITATION ONLY
- ○ ○ PRECIPITATION, STORAGE
- ● ○ PRECIPITATION AND TEMPERATURE
- ● ○ PRECIPITATION, TEMPERATURE AND EVAPORATION

TYPE OF GAGE

- NON-RECORDING
- RECORDING
- BOTH TYPES

USWB STATIONS SHOWN IN BLACK
OTHER STATIONS SHOWN IN RED

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN FRANCISCO BAY DISTRICT

CLIMATOLOGICAL STATIONS IN THE CENTRAL COASTAL AREA 1964





CLIMATOLOGICAL STATIONS

SANTA CRUZ COAST (No. D0)

0874 San Lorenzo
2159 Oscar Ranch
2290 Davenport
7910 Santa Cruz
8840 Sunset Beach State Park
9475 Wilder Ranch

PAJARO-SAN BENITO RIVERS (No. D1)

1170 Buena Vista
1247 Buzzard Lagoon
1374 Chilesden Pass
1530-01 Chilesden
1766 Cienega
2327 Freedom 8 NW
2417 Gilroy
3422 Gilroy 14 ENE
3528 Hernandez 7 SE
4027 Hollister
4072-10 Hollister Costa
4075 Hollister No. 2
4075 Hollister 10 ENE
5055 Morgan Hill 5CS
5844 Morgan Hill 2 L
5973 Mount Madonna
5973-11 Mt. Madonna Co. Park
6010 Pajaro River Ranch
6190 Quico Sabe - Ray Camp
7149 Rancho Quico Sabe
7174 San Felipe Highway Station
7555 San Juan Bautista Mission
8447 Spreckels Hill-Laguna Seca
9184 Upper Tree Pines
9479 Watsonville Water Works

LOWER SALINAS RIVER (No. D2)

0322 Arroyo Seco
2352 Del Monte
3236 Fremont Peak State Park
3502 Gonzales 9 ESE
3591 Greenfield Baker
3727 Hanes Valley
4555 King City
5195 Monterey
5850 Paloma
6326 Pioneros National Mon.
7150 Priest Valley
7656 Salinas 2 E
7649 Salinas FAA Airport
7716 San Aido
7845-10 San Lucas Gullitt
7855-10 Santa Rita Mother
8176 Slack Canyon
8331 Soledad
8338-01 Soledad CTF
8426 Spreckels Hwy. Bridge
8426-01 Spreckels

UPPER SALINAS RIVER (No. D3)

0360-01 Alapadero HOS
1034 Bradley
1993 Lion Ranch
5017 Lockwood 2 W
6703 Paradise
6706 Paradise 7 NW
7672 Salinas Dam
7716 San Antonio Mission
8349 Templeton
9221 Vallecito

MONTREY COAST (No. D4)

5749 Big Sur State Park
0918-17 Bouthers Gap
1334 Carmel Valley
3184 Lucia Willow Springs
4856 Pico Blanco B.S. Camp
7248-21 Rancho Pico
7248-01 Roosevelt Ranch
7731 San Clemente Dam

SAN LUIS OBISPO COAST (No. D5)

5170-03 Los Burros
5219 Morro Bay 3 W
7024 Point Piedras Blancas

SANTA MARIA-CUYAMA RIVERS (No. D6)

5179 Upper Morro Creek

COAST-MARIN (No. E1)

MARIN-SOMONA (No. E2)

3724 Hamilton A.P.D.
4300 Kentfield
5047 Mill Valley
6770-02 Novato Fire House
6356 Oakville 4 SW No. 2
6826 Parolima F. S. No. 2
6826-01 Petaluma - Burns
6829 Petaluma 1 H
6853 Phosola Lake Dam
7207-01 San Anselmo
7850 San Rafael
7850-06 San Rafael Nat. Bank
8331 Sonoma
8719 Tamalpais Valley
8920-21 Tiburon-Topham

NAPA-SOLANO (No. E3)

0312 Angwin Fac. Union Col
0312 Atlas Road
1312 Collierville
1537 Carneros Valley
1913 Collierville
1976 Corn
2374-01 Denavision 1 S
2380 Oculina Landrice
2933 Fairfield
2934 Fairfield Police Sta
3612-01 Green Valley
4677 Lake Curry
5333 Napa Island
5055 Napa
6068 Napa Haven
6074 Napa State Hospital
6351 Oakville 1 NW
6354 Oakville 4 SW
7043 Saint Helena
7045 Saint Helena 4 WSW
9006 Tierra Air Force Base
9305 Veterans Home
9675-61 Wild Horse Valley
9761 Yountville Camble

EAST BAY (No. E4)

0064 Alamo 1 N
0693 Berkeley
1216 Burton Ranch
1592 Concord 3 E
2177 Crockett
3663 Harvard 6 ESE
4635 Lafayette 2 NNE
5371 Martinez 3 S
5372 Martinez 3 SSE
5377 Martinez Peter Scallion
5915 Mt. Diablo North Gate
6335 Oakland VB AP
7070 Port Chicago NAD
7414 Richmond
7641 Saint Mary's College
9485 Upper San Leandro Fillers
9420 Walnut School
9423 Walnut Creek 2 ESE
9426 Walnut Creek 2 ENE
9427 Walnut Creek 4 E

ALAMEDA CREEK (No. E5)

1781 Colverna Reservoir
2387 Geeter Ranch
4996 Livermore Sewage Plant
4997 Livermore 2 SW
5933 Mt. Hamilton
6164 Newark
6190-05 Nile S. P. Depot
6991-05 Pleasanton Highway

SANTA CLARA VALLEY (No. E6)

0053 Almaden Park Road
0125 Almaden Reservoir
0706 Berryessa 1 E (Toyon Ave.)
0810 Black Mountain 2 SW
1223 Colono Reservoir
1341-10 Cambrian Park
1377-01 Campbell Water Co
2109 Coyote Reservoir
2919 Esmeralda-Silver Cr. Rd
3419 Gilroy 8 NE

SANTA CLARA VALLEY (No. E6) Cont'd

2681 Guadalupe Reservoir
4916 Leroy Anderson Dam
4922 Lexington Reservoir
5123 Los Gatos
5123-04 Los Gatos-Old Orchard Rd
5123 Los Gatos 8 SW
5645 Morgan Hill 6 WSW
5897-01 Mt. View F. S.
6445 Palo Alto City Hall
6791-43 Penitencia Rain Can.
7339 Redwood City
7821 San Jose
7824 San Jose Deid. F. T.
7912 Santa Clara University
7958-01 Saratoga-Clark
7958-03 Saratoga-Melago
8068 Stevensville Lake
8519 Stevens Creek Reservoir
9210 Vasona Reservoir
9814 Wright

BAYSIDE-SAN MATEO (No. E7)

1206 Burlingame
2769 San Francisco We AP
2772 San Francisco Fed. Office Bldg.
2854 San Mateo

COAST-SAN MATEO (No. E8)

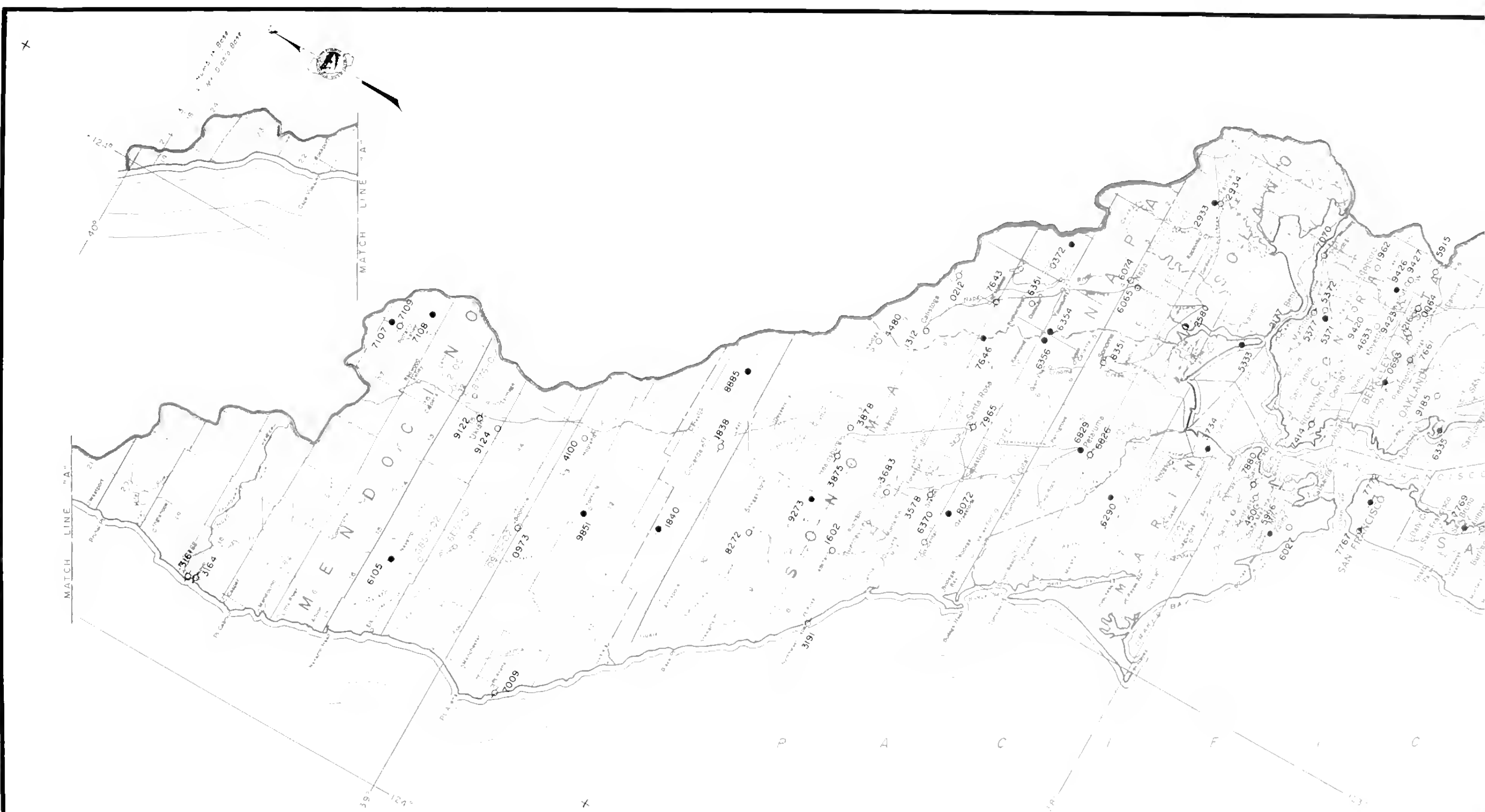
3714 Half Moon Bay 2 NW
4060 La Honda
7085 Portola State Park
7767 San Francisco Richmond Summit
7807 San Gregorio 3 SE

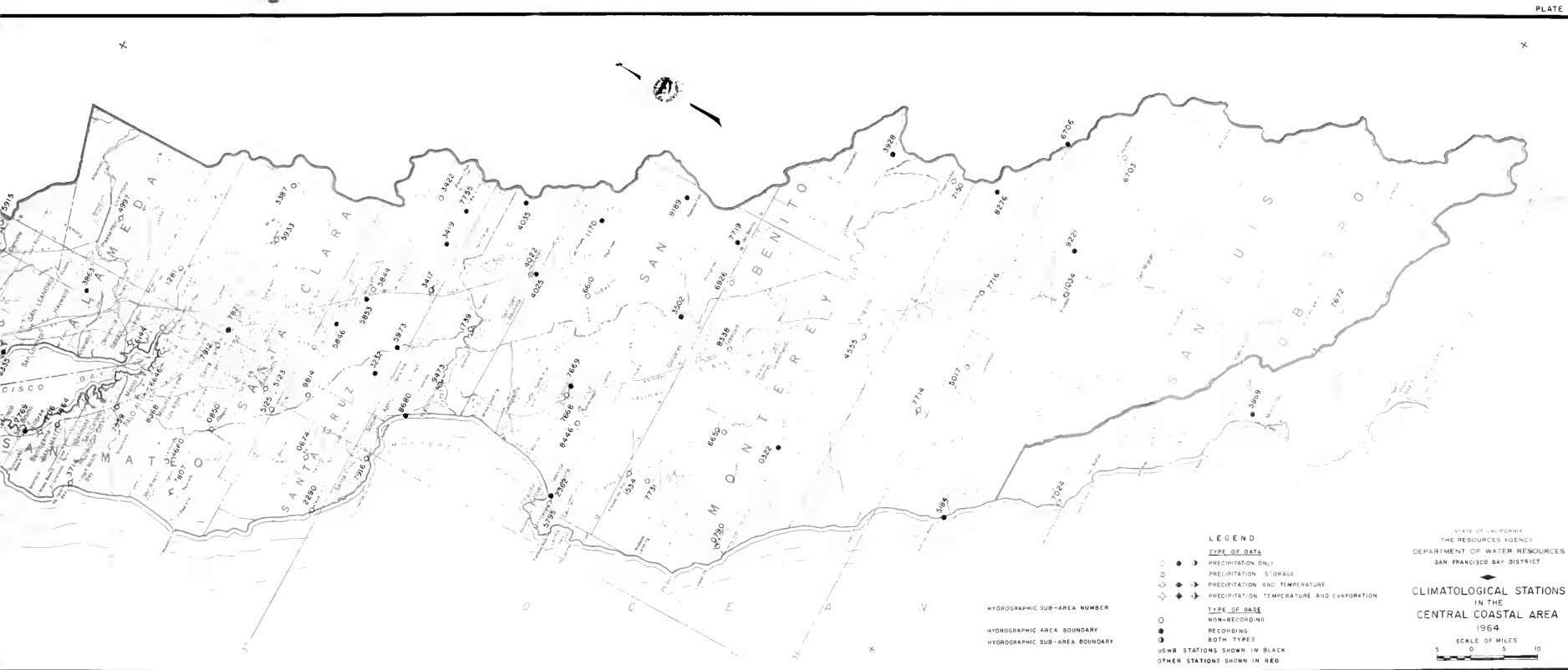
MENDOCINO COAST (No. F8)

0973 Bonville RMS
0973-02 Bonville-Barres
1840 Cloverdale 1 W
3161 Port Bragg
3164 Port Bragg Aviation
3161 Port Bragg
6051-01 Navarro 1 NW
6051-02 Philo 2 NW
6051-03 Philo 4 NW
7009 Potter Arch
8172 Skaggs Spr. Las Lomas Ranch
7851 Yorkville

RUSSIAN RIVER (No. F9)

0135 Zepherus Dam
0876 Dixon Landing
0909 Don Juan Dam
1002 Casadero
1832 Cloverdale 3 SSE
2105 Coyote Dam-Lake Mendocino
3517 Geason
3517 Geason 1 W
3683 Guadalupe
3815 Guadalupe 2 E
3818 Hopland Largo Station
4277 Jovannese-Mary
4480 Kellogg
4502 Kent Lake
4857 Lagunitas Lake
5946 Mt. Tamalpais 2 SW
6187 Nicasio
6740 Novato 6 WSW
6740 Occidental
7107 Potter Valley 3 NW
7108 Potter Valley 3 SE
7109 Potter Valley P. H.
7646 Saint Helena 4 WSW
7654 Santa Rosa Sewage Plant
7905 Santa Rosa
7905-03 Santa Rosa Federalist
8072 Sebastopol 4 SSE
8176-01 The Geysers
8954 Tomales
9122 Ukiah
9126 Ukiah 4 WSW
9273 Venado
9710 Woodcreek





HYDROGRAPHIC SUB-AREA NUMBER
HYDROGRAPHIC AREA BOUNDARY
HYDROGRAPHIC SUB-AREA BOUNDARY

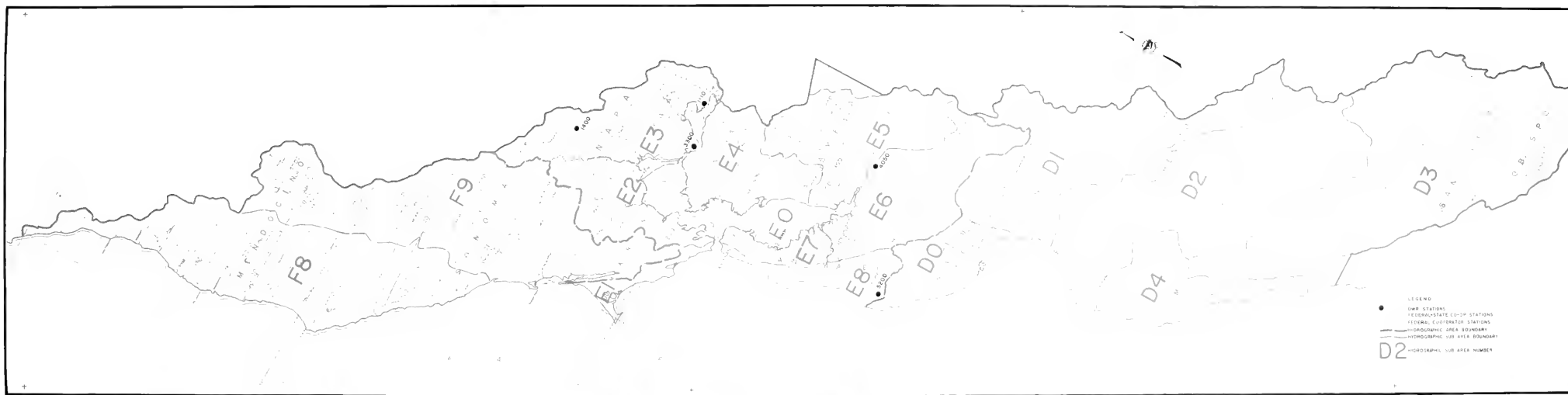
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- PRECIPITATION ONLY
 - PRECIPITATION STORAGE
 - ◆ PRECIPITATION AND TEMPERATURE
 - ◆ PRECIPITATION TEMPERATURE AND EVAPORATION
- TYPE OF STATION
- NON-RECORDING
 - RECORDING
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- USWB STATIONS SHOWN IN BLACK
OTHER STATIONS SHOWN IN RED

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN FRANCISCO BAY DISTRICT

**CLIMATOLOGICAL STATIONS
IN THE
CENTRAL COASTAL AREA
1964**

SCALE OF MILES
0 5 10





SURFACE WATER MEASUREMENT STATIONS

SANTA CRUZ (No. 50)

1109 Branchito Creek at Santa Cruz
1200 San Lorenzo River at Big Trees
1300 Zapata Creek at Zapata
1400 Agave Creek at Agave
1500 Soquel Creek at Soquel
1600 Soquel Creek West of Soquel
1700 Scott Cr above Little Cr. at Townsend

EAST BAY (No. 51)

1100 San Lorenzo Creek at Hayward
1200 Stream Creek at San Pablo
1300 Walnut Creek at Walnut Creek
1400 San Ramon Creek at San Ramon

ALAMEDA CREEK (No. 52)

1050 Alameda Creek at Union City
1100 Dry Creek at Union City
1150 Alameda Creek at El Cerrito
1200 Arroyo Valley at Pleasanton
1250 Arroyo Valley at Livermore
1300 Arroyo Valley at Livermore
1350 Arroyo Valley above Long Canyon at Livermore
1400 Arroyo Mocho at Livermore
1450 Arroyo Mocho at Livermore
1500 Arroyo Mocho at Livermore
1550 San Antonio Creek at San Antonio
1600 Patterson Creek at Union City

SANTA CLARA VALLEY (No. 53)

1100 Maradero Creek at Palo Alto
1200 San Francisco Cr. at Stanford Univ.
1300 San Joaquin Cr. Trib. at Stanford Univ.
1400 San Francisco Cr. Trib. at Stanford Univ.
1500 San Francisco Cr. Trib. at Stanford Univ.
1600 Arroyo de las Cucas at Milpitas
1700 Coyote Creek at Milpitas
1800 Coyote Creek at Milpitas
1900 Santa Clara River at San Jose
2000 Santa Clara River at San Jose
2100 Santa Clara River at San Jose
2200 Santa Clara River at San Jose
2300 Santa Clara River at San Jose
2400 Santa Clara River at San Jose
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3100 Santa Clara River at San Jose
3200 Santa Clara River at San Jose
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3500 Santa Clara River at San Jose

LOWER SALINAS RIVER (No. 54)

1100 El Jeco Creek at Sycamore
1200 Salinas River at Sycamore
1300 Salinas River at Sycamore
1400 Salinas River at Sycamore
1500 Salinas River at Sycamore
1600 Salinas River at Sycamore
1700 Salinas River at Sycamore
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UPPER SALINAS RIVER (No. 55)

1200 Salinas River at Salinas
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MISSISSIPPI-SAN JUAN (No. 56)

1200 Salinas River at Salinas

COAST-SAN JUAN (No. 57)

1200 Salinas River at Salinas

MONTEREY COAST (No. 58)

1200 Salinas River at Salinas
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SAN FRANCISCO BAY (No. 59)

1200 Salinas River at Salinas

MARIN-SUNOMA (No. 60)

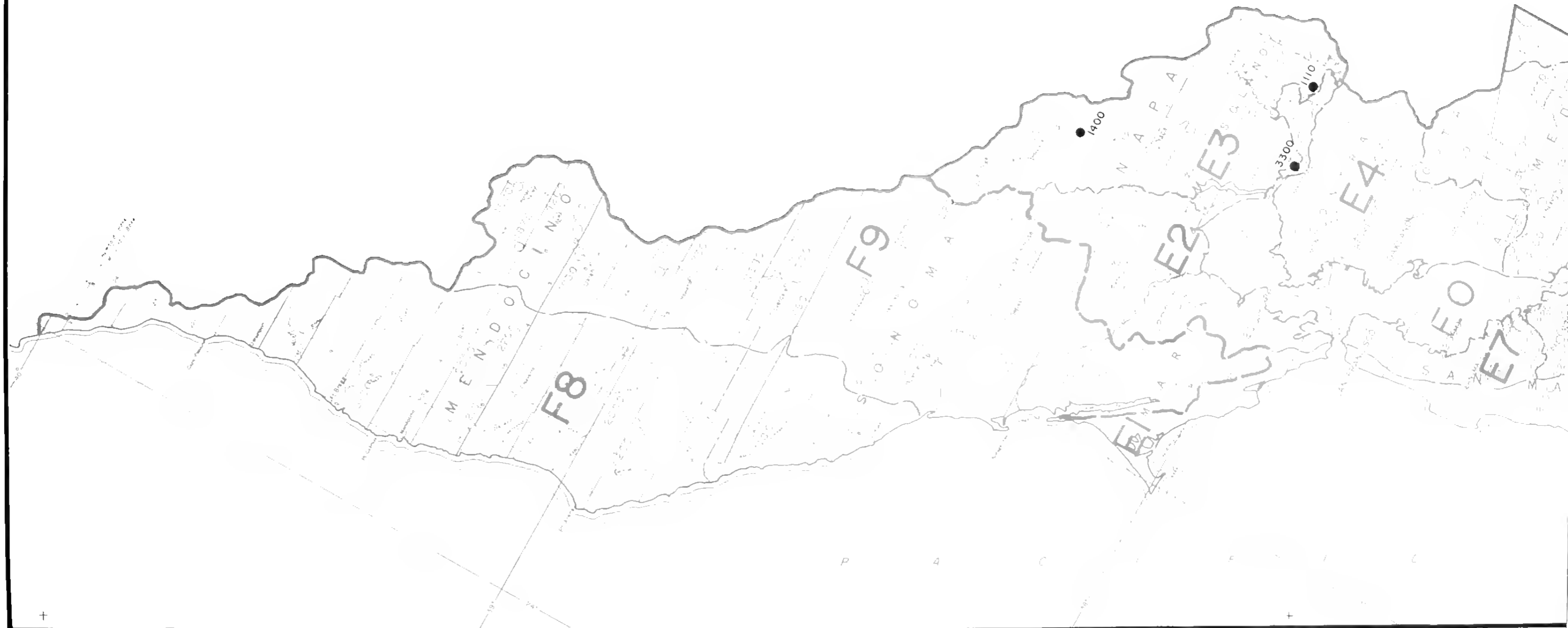
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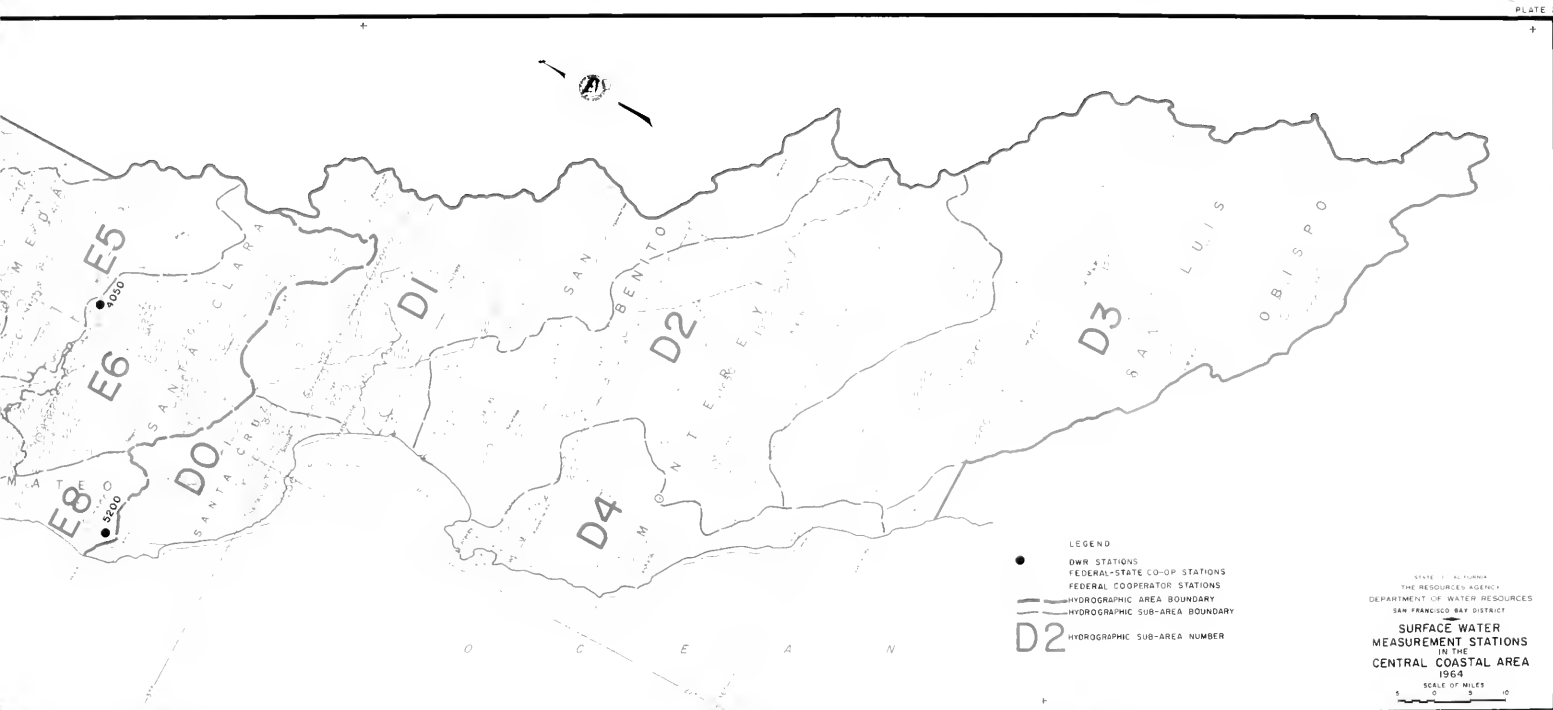
MAPE-SOLANO (No. 61)

1200 Salinas River at Salinas
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3500 Salinas River at Salinas

RUSSIAN RIVER (No. 62)

1010 Russian River at Cazadero
1100 Russian River at Cazadero
1200 Russian River at Cazadero
1300 Russian River at Cazadero
1400 Russian River at Cazadero
1500 Russian River at Cazadero
1600 Russian River at Cazadero
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3400 Russian River at Cazadero
3500 Russian River at Cazadero

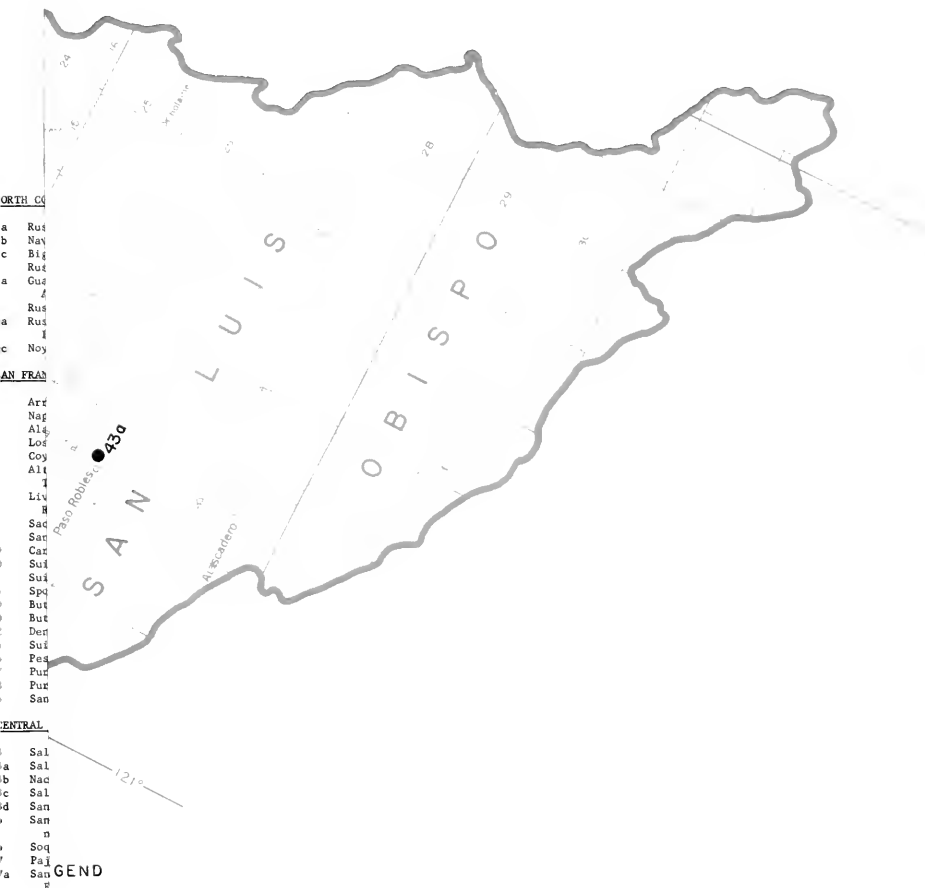




● OWR STATIONS
 ○ FEDERAL-STATE CO-OP STATIONS
 ○ FEDERAL COOPERATOR STATIONS
 — HYDROGRAPHIC AREA BOUNDARY
 - - - HYDROGRAPHIC SUB-AREA BOUNDARY
 D2 HYDROGRAPHIC SUB-AREA NUMBER

STATE OF CALIFORNIA
 THE RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
 SAN FRANCISCO BAY DISTRICT
 SURFACE WATER
 MEASUREMENT STATIONS
 IN THE
 CENTRAL COASTAL AREA
 1964
 SCALE OF MILES
 0 5 10





WATER QUALITY CONTROL BOARD REGION NUMERAL

WATER QUALITY CONTROL BOARD REGION BOUNDARY

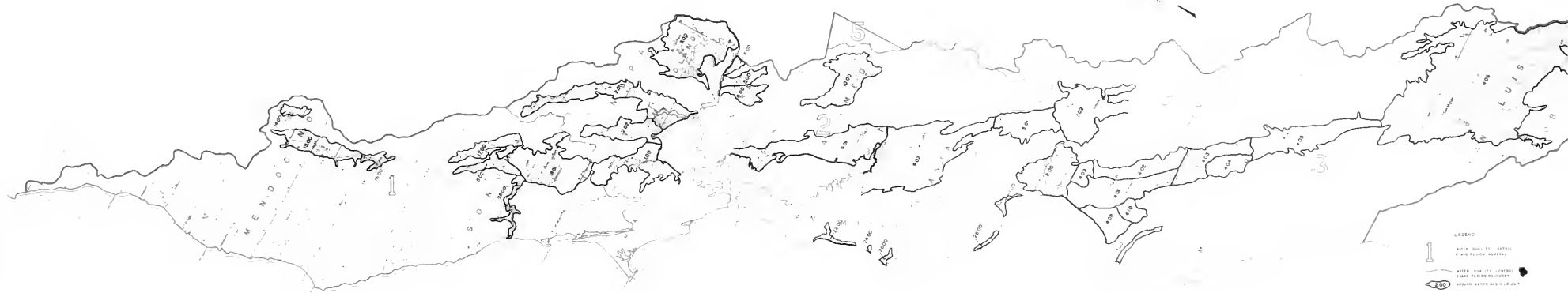
SURFACE WATER QUALITY SAMPLING STATION

CONCENTRATION OF STATIONS ALONG THE
N LORENZO AND SALINAS RIVERS RESULTED
FROM SPECIFIC INVESTIGATIONS

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN FRANCISCO BAY DISTRICT

**SURFACE WATER
QUALITY STATIONS**
IN THE
CENTRAL COASTAL AREA
1964

SCALE OF MILES
5 0 5 10



LEGEND

1 WATER QUALITY CONTROL REGION NUMBER

2 WATER QUALITY CONTROL BOARD REGION BOUNDARY

3 GROUNDWATER BASIN UNIT

GROUND WATER BASINS OR UNITS
IN THE
CENTRAL COASTAL AREA

NORTH COASTAL REGION (No. 1)

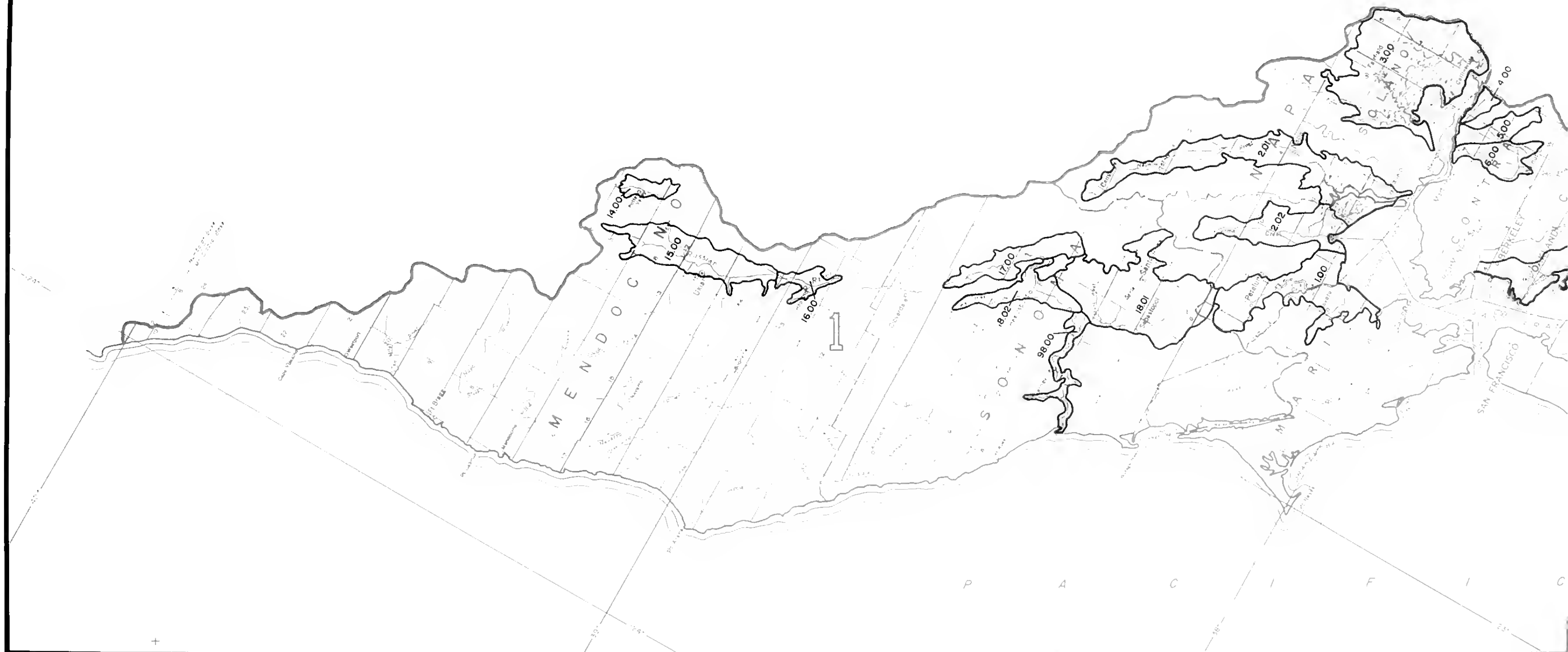
1-14.00 Potter Valley
1-15.00 Ukiah Valley
1-16.00 Sanel Valley
1-17.00 Alexander Valley
1-18.00 Santa Rosa Valley
1-18.01 Santa Rosa Area
1-18.02 Healdsburg Area
1-98.00 Lower Russian River Valley

CENTRAL COASTAL REGION (No. 3)

3-1.00 Soquel Valley
3-2.00 Pajaro Valley
3-3.00 Gilroy-Hollister Valley
3-3.01 South Santa Clara County
3-3.02 San Benito County
3-4.00 Salinas Valley
3-4.01 Pressure Area
3-4.02 East Side Area
3-4.03 Forebay Area
3-4.04 Arroyo Seco Cone
3-4.05 Upper Valley Area
3-4.06 Paso Robles Basin
3-4.08 Seaside Area
3-4.09 Longley Area
3-4.10 Corral de Tierra Area
3-7.00 Carmel Valley
3-26.00 West Santa Cruz Terrace

SAN FRANCISCO BAY REGION (No. 2)

2-1.00 Petaluma Valley
2-2.00 Napa-Sonoma Valley
2-2.01 Napa Valley
2-2.02 Sonoma Valley
2-3.00 Suisun-Fairfield Valley
2-3.00 Clayton Valley
2-6.00 Ignacio Valley
2-9.00 Santa Clara Valley
2-9.01 East Bay Area
2-9.02 South Bay Area
2-10.00 Livermore Valley
2-22.00 Ball Moon Bay Terrace
2-25.00 San Gregorio Valley
2-26.00 Pescadero Valley





LEGEND

1

WATER QUALITY CONTROL
BOARD REGION NUMERAL

—

WATER QUALITY CONTROL
BOARD REGION BOUNDARY

200

GROUND WATER BASIN OR UNIT

STATE OF CALIFORNIA
THE RESOURCES AGENCY
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SAN FRANCISCO BAY DISTRICT

GROUND WATER BASINS OR UNITS
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1964

SCALE OF MILES
0 5 10



1890

1891

1892

1893

1894

1895

1896

1897

1898

1899

1900

1901

1902

1903

1904

1905

1906

1907

1908

1909

1910





1
 WATER QUALITY DATA (10-MILE BUFFER)
 WATER QUALITY DATA (10-MILE BUFFER)
 SURFACE WATER QUALITY SAMPLING STATION

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SURFACE WATER QUALITY STATIONS

NORTH COASTAL REGION (No. 1)

- 24 Russian River near Hopland
- 25 Navarro River near Navarro
- 26 Big River near mouth
- 27 Russian River near Healdsburg
- 28 Gualala River, South Fork, near Annapolis
- 29 Russian River at Guerneville
- 30 Russian River, East Fork, at Potter Valley Power House
- 31 Noyo River near Fort Bragg

SAN FRANCISCO BAY REGION (No. 2)

- 71 Arroyo Del Valle near Livermore
- 72 Napa River near St. Helena
- 73 Alameda Creek near Niles
- 74 Los Gatos Creek near Los Gatos
- 75 Coyote Creek near Madrone
- 76 Alameda Creek at Altamont
- 77 Turnout of South Bay Aqueduct
- 78 Livermore Canal at Patterson Reservoir
- 79 Sacramento River at Colusa
- 80 San Pablo Bay at Crockett
- 81 Carquinez Strait at Martinez
- 82 Suisun Bay at Pittsburg
- 83 Suisun Bay at Port Chicago
- 84 Spoonbill Creek
- 85 Butano Creek
- 86 Butano Creek
- 87 Donatien Creek
- 88 Suisun Bay at Middle Point
- 89 Pescadero Creek
- 90 Purisima Creek
- 91 Purisima Creek
- 92 San Gregorio Creek

CENTRAL COASTAL REGION (No. 3)

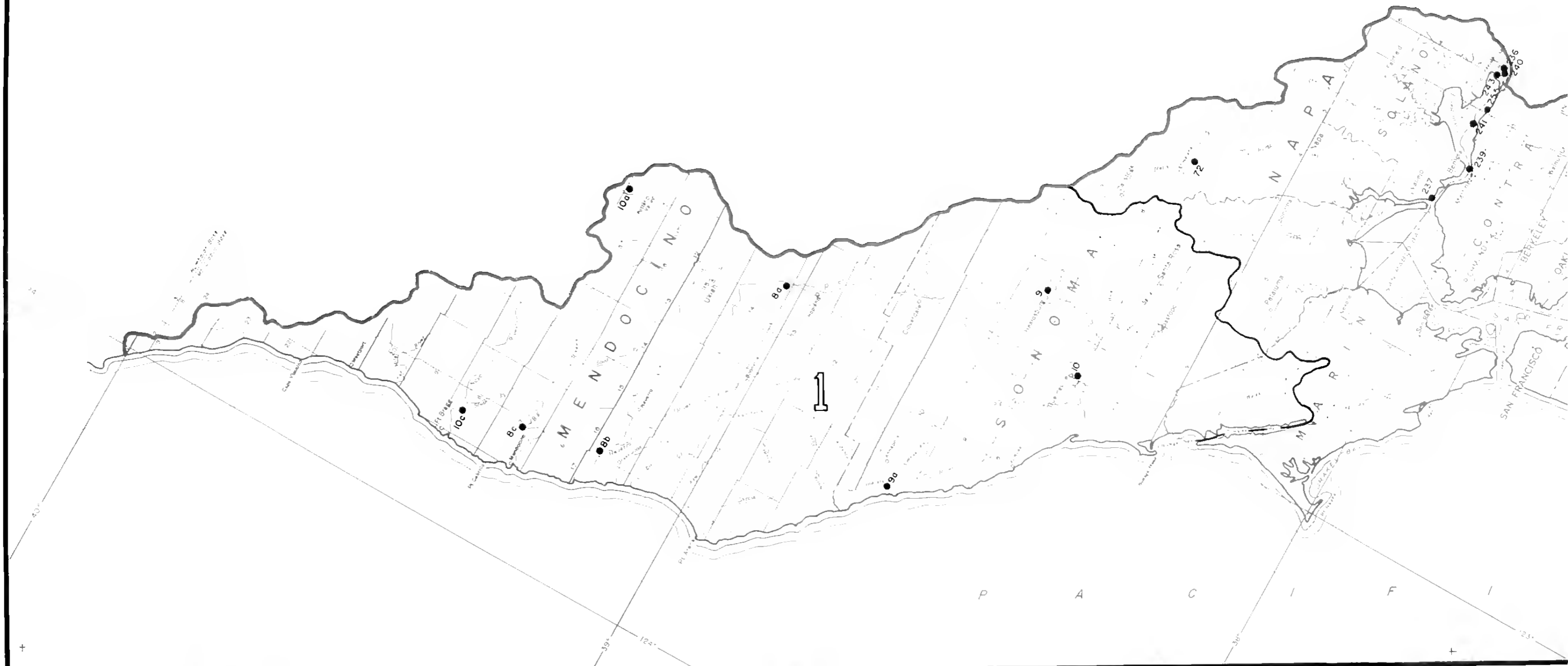
- 43 Salinas River near Speake
- 44 Salinas River at Paso Robles
- 45 Nacimiento River near San Miguel
- 46 Salinas River near Bradley
- 47 San Antonio River near Pismo
- 48 San Lorenzo River at Big Trees near Felton
- 49 Soquel Creek at Soquel
- 50 Pejaro River near Chittenden
- 51 San Benito River near Bear Valley Fire Station

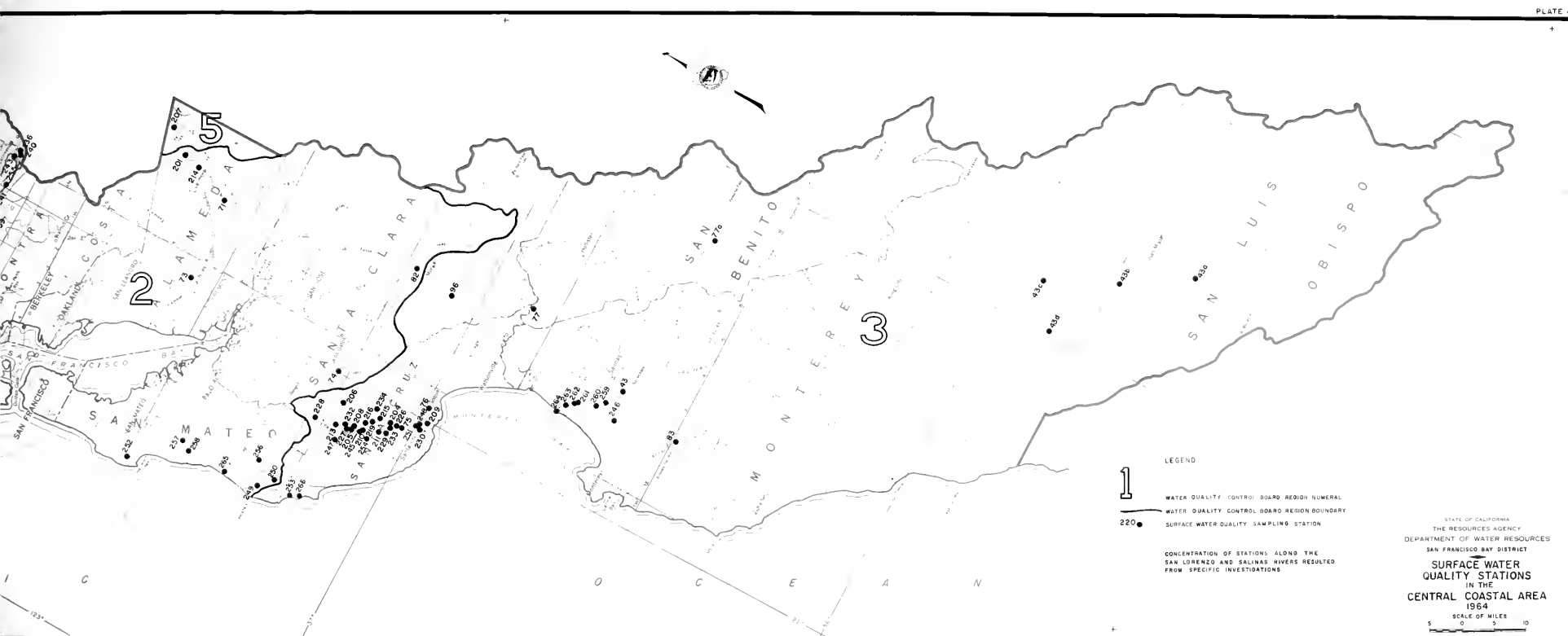
CENTRAL COASTAL REGION (No. 3) Cont'd

- 83 Carmel River at Robles Del Rio
- 84 Uvas Creek near Morgan Hill
- 85 Bear Creek one mile east of Felton
- 86 Bear Creek at Boulder Creek
- 87 Bear Creek four miles northeast of Boulder Creek
- 88 Boulder Creek at Boulder Creek
- 89 Branchito Creek near Santa Cruz
- 90 Clear Creek at Brookdale
- 91 Fall Creek one-half mile north of Felton
- 92 Kings Creek two miles north of Boulder Creek
- 93 Lompico Creek one mile north of Olympia
- 94 Love Creek at Ben Lomond
- 95 Newell Creek one mile northeast of Ben Lomond
- 96 San Lorenzo River at Big Trees
- 97 San Lorenzo River at Boulder Creek
- 98 San Lorenzo River six miles north of Boulder Creek
- 99 San Lorenzo River at Felton
- 100 San Lorenzo River at Santa Cruz
- 101 Two Bar Creek one mile north of Boulder Creek
- 102 Zayante Creek at Felton
- 103 Zayante Creek at Zayante
- 104 Albe Creek
- 105 Blanco Drain into Salinas River
- 106 Boulder Creek
- 107 Branchito Creek
- 108 Carbonate Creek
- 109 Gasco Creek
- 110 Marshall Creek
- 111 Salinas River, mile 9.51
- 112 Salinas River, mile 7.13
- 113 Salinas River, mile 4.65
- 114 Salinas River, mile 3.50
- 115 Salinas River, mile 1.70
- 116 Salinas River, mile 0.00
- 117 Whitehouse Creek

CENTRAL VALLEY REGION (No. 4)

- 207 Bethany Forebay at South Bay Pumping Plant





- 1
- LEGEND
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